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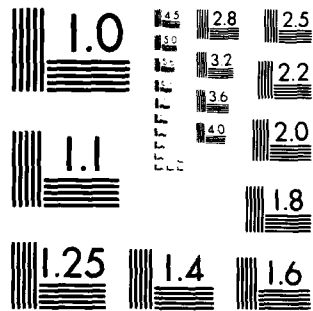
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**RULES AND REGULATIONS**

**FOR**

**RECREATION BOATING.**

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DEPARTMENT OF TRANSPORTATION  
UNITED STATES COAST GUARD

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FOREWORD

The pamphlet, "Rules and Regulations for Recreational Boats", CG-497, contains builder and operator requirements for recreational boats subject to the Federal Boat Safety Act of 1971 as amended (46 U.S.C. 1451-89).

The rules and regulations in this pamphlet have been reproduced from Subchapter O (Pollution) and S (Boating Safety) of Chapter 1, Title 33 (Coast Guard, Department of Transportation), of the Code of Federal Regulations which have been published in various issues of the Federal Register. These rules and regulations include amendments published in Federal Registers before 30 June 1977.

Boat and equipment builders, and to a lesser extent, boat operators, should make themselves familiar with the regulations in this pamphlet. To attain this goal, the Coast Guard members and employees who administer and enforce these laws, rules, and regulations will offer you assistance, if needed.

The publication date of this pamphlet is July 1977. It will be revised and republished in July 1979.

D. F. LAUTH  
Chief, Office of Boating Safety

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Public Law 92-75 as Amended  
92nd Congress, H. R. 19  
August 10, 1971

AN ACT

To provide for a coordinated national boating safety program.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,* That this Act may be cited as the "Federal Boat Safety Act of 1971".

DECLARATION OF POLICY AND PURPOSE

SEC. 2. It is hereby declared to be the policy of Congress and the purpose of this Act to improve boating safety and to foster greater development, use, and enjoyment of all the waters of the United States by encouraging and assisting participation by the several States, the boating industry, and the boating public in development of more comprehensive boating safety programs; by authorizing the establishment of national construction and performance standards for boats and associated equipment; and by creating more flexible regulatory authority concerning the use of boats and equipment. It is further declared to be the policy of Congress to encourage greater and continuing uniformity of boating laws and regulations as among the several States and the Federal Government, a higher degree of reciprocity and comity among the several jurisdictions, and closer cooperation and assistance between the Federal Government and the several States in developing, administering, and enforcing Federal and State laws and regulations pertaining to boating safety.

DEFINITIONS

SEC. 3. As used in this Act, and unless the context otherwise requires -

- (1) "Boat" means any vessel -
  - (A) manufactured or used primarily for noncommercial use;
  - or
  - (B) leased, rented, or chartered to another for the latter's commercial use; or
  - (C) engaged in the carrying of six or fewer passengers.
- (2) "Vessel" includes every description of watercraft, other than a seaplane on the water, used or capable of being used as a means of transportation on the water.
- (3) "Undocumented vessel" means a vessel which does not have and is not required to have a valid marine document as a vessel of the United States.
- (4) "Use" means operate, navigate, or employ.
- (5) "Passenger" means every person carried on board a vessel

other than -

- (A) the owner or his representative;



- (B) the operator;
  - (C) bona fide members of the crew engaged in the business of the vessel who have contributed no consideration for their carriage and who are paid for their services; or
  - (D) any guest on board a vessel which is being used exclusively for pleasure purposes who has not contributed any consideration, directly, or indirectly, for his carriage.
- (6) "Owner" means a person who claims lawful possession of a vessel by virtue of legal title or equitable interest therein which entitles him to such possession.
- (7) "Manufacturer" means any person engaged in -
- (A) the manufacture, construction, or assembly of boats or associated equipment; or
  - (B) the manufacture or construction of components for boats or associated equipment to be sold for subsequent assembly; or
  - (C) the importation into the United States for sale of boats, associated equipment, or components thereof.
- (8) "Associated equipment" means -
- (A) any system, part, or component of a boat as originally manufactured or any similar part or component of a boat as originally manufactured or any similar part or component manufactured or sold for replacement, repair, or improvement of such system, part, or component;
  - (B) any accessory or equipment for, or appurtenance to, a boat; and
  - (C) any marine safety article, accessory, or equipment intended for use by a person on board a boat; but
  - (D) excluding radio equipment.
- (9) "Secretary" means the Secretary of the Department in which the Coast Guard is operating.
- (10) "State" means a State of the United States, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the District of Columbia.
- (11) "Eligible State" means one that has a State boating safety program which has been accepted by the Secretary.

#### APPLICABILITY

SEC. 4. (a) This Act applies to vessels and associated equipment used, to be sued, or carried in vessels used, on waters subject to the jurisdiction of the United States and on the high seas beyond the territorial seas for vessels owned in the United States.

(b) Sections 5 through 11 and subsections 12(a) and 12(b) of this Act are applicable also to boats moving or intended to be moved in interstate commerce.

(c) This Act, except those sections where the content expressly indicates otherwise, does not apply to -

- (1) foreign vessels temporarily using waters subject to United States jurisdiction;

(2) military or public vessels of the United States, except recreational-type public vessels;

(3) a vessel whose owner is a State or subdivision thereof, which is used principally for governmental purposes, and which is clearly identifiable as such;

(4) ships' lifeboats.

(d) Until such time as there is a final judicial determination that they are navigable waters of the United States, the following waters lying entirely within the State of New Hampshire, to wit: Lake Winnisquam, Lake Winnepesaukee, portions of the Merrimack River, and their tributary and connecting waters, are declared not to be waters subject to the jurisdiction of the United States, within the meaning of this section.

#### BOAT AND ASSOCIATED EQUIPMENT STANDARDS AND USE

##### SAFETY REGULATIONS AND STANDARDS

SEC. 5. (a) The Secretary may issue regulations -

(1) establishing minimum safety standards for boats and associated equipment, and establishing procedures and test required to measure conformance with such standards. Each standard shall be reasonable, shall meet the need for boating safety, and shall be stated, insofar as practicable, in terms of performance;

(2) requiring the installation, carrying, or using of associated equipment on boats and classes of boats subject to this Act; and prohibiting the installation, carrying, or using of associated equipment which does not conform with safety standards established under this section. Equipment contemplated by this clause includes, but is not limited to, fuel systems, ventilation systems, electrical systems, navigational lights, sound producing devices, fire fighting equipment, lifesaving devices, signaling devices, ground tackle, life and grab rails, and navigational equipment.

(b) A regulation or standard issued under this section -

(1) shall specify an effective date which is not earlier than one hundred and eighty days from the date of issuance, except that this period shall be increased in the discretion of the Secretary to not more than twenty-four months in any case involving major product design, retooling, or major changes in the manufacturing process, unless the Secretary finds that there exists a boating safety hazard so critical as to require an earlier effective date; what constitutes major product redesign, retooling, or major changes shall be determined by the Secretary;

(2) may not compel substantial alteration of a boat or item of associated equipment which is in existence, or the construction or manufacture of which is commenced before the effective date of the regulation; but subject to that limitation may require compliance or performance to avoid a substantial risk of personal injury to the public that the Secretary considers appropriate in relation to the degree of hazard that the compliance will correct; and

(3) shall be consistent with laws and regulations governing the installation and maintenance of sanitation equipment.

#### PREScribing REGULATIONS AND STANDARDS

SEC. 6. In establishing a need for formulating and prescribing regulations and standards under section 5 of this Act, the Secretary shall, among other things -

- (1) consider the need for the extent to which the regulations or standards will contribute to boating safety;
- (2) consider relevant available boat safety standards, statistics and data, including public and private research, development, testing, and evaluation;
- (3) consider whether any proposed regulation or standard is reasonable and appropriate for the particular type of boat or associated equipment for which it is prescribed;
- (4) consult with the Boating Safety Advisory Council established pursuant to section 33 of this Act regarding all of the foregoing considerations.

#### DISPLAY OF LABELS EVIDENCING COMPLIANCE

SEC. 7. The Secretary may require or permit the display of seals, labels, plates, insignia, or other devices for the purpose of certifying or evidencing compliance with Federal safety regulations and standards for boats and associated equipment.

#### DELEGATION OF INSPECTION FUNCTION

SEC. 8. (a) The Secretary may, subject to such regulations, supervision and review as he may prescribe, delegate to any person, or private or public agency, or to any employee under the supervision of such person or agency, any work, business, or function respecting the examination, inspection, and testing necessary for compliance enforcement or for the development of data to enable the Secretary to prescribe and to issue regulations and standards, under sections 5 and 6 of this Act.

(b) The Secretary may conduct research, testing, and development as necessary to carry out the purposes of this Act, including the procurement (by negotiation or otherwise) of experimental and other boats or associated equipment for research and testing purposes, and the subsequent sale thereof.

#### EXEMPTIONS

SEC. 9. The Secretary may, if he considers that boating safety will not be adversely affected, issue exemptions from any provision of this Act or regulations and standards established thereunder, on terms and conditions as he considers appropriate.

#### FEDERAL PREEMPTION

SEC. 10. Unless permitted by the Secretary under section 9 of this Act, no State or political subdivision thereof may establish, continue in effect, or enforce any provision of law or regulation which establishes

any boat or associated equipment performance or other safety standard, or which imposes any requirement for associated equipment, except, unless disapproved by the Secretary, the carrying or using of marine safety articles to meet uniquely hazardous conditions or circumstances within the State, which is not identical to a Federal regulation issued under section 5 of this Act.

#### ADMISSION OF NONCONFORMING FOREIGN-MADE BOATS

SEC. 11. The Secretary of the Treasury and the Secretary may, by joint regulations, authorize the importation of a nonconforming boat or associated equipment upon terms and conditions, including the furnishing of bond, which will assure that the boat or associated equipment will be brought into conformity with the applicable Federal safety regulations and standards before it is used on waters subject to the jurisdiction of the United States.

#### PROHIBITED ACTS

SEC. 12. (a) No person shall -

(1) manufacture, construct, assemble, introduce, or deliver for introduction in interstate commerce, or import into the United States, or if engaged in the business of selling or distributing boats or associated equipment, sell or offer for sale, any boat, associated equipment, or component thereof to be sold for subsequent assembly, unless -

(A) it conforms with regulations and standards prescribed under this Act, or

(B) it is intended solely for export, and so labeled, tagged, or marked on the boat or equipment and on the outside of the container, if any, which is exported.

(2) affix, attach, or display a seal, label, plate, insignia, or other device indicating or suggesting compliance with Federal safety standards, on, in, or with a boat or item of associated equipment, which is false or misleading;

(3) fail to furnish a notification as required by section 15(a) or exercise reasonable diligence in fulfilling the undertaking given pursuant to section 15(c) of this Act.

(b) No person shall be subject to any penalty contained in this section if he establishes that he did not have reason to know in the exercise of due care that a boat or associated equipment does not conform with applicable Federal boat safety standards, or who holds a certificate issued by the manufacturer of the boat or associated equipment to the effect that such boat or associated equipment conforms to all applicable Federal boat safety standards, unless such person knows or reasonably should have known that such boat or associated equipment does not so conform.

(c) No person may use a vessel in violation of this Act or regulations issued thereunder.

(d) No person may use a vessel, including one otherwise exempted by section 4(c) of this Act, in a negligent manner so as to endanger the life,

limb, or property of any person. Violations of this subsection involving use which is grossly negligent, subject the violator, in addition to any other penalties prescribed in this Act, to the criminal penalties prescribed in this Act, to the criminal penalties prescribed in section 34.

(e) No vessel equipped with propulsion machinery of any type and not subject to the manning requirements of the vessel inspection laws administered by the Coast Guard, may while carrying passengers for hire, be used except in the charge of a person licensed for such service under regulations, prescribed by the Secretary, which pertain to qualifications, issuance, revocation, or suspension, and related matters.

(f) Section 12(e) of this Act shall not apply to any vessel being used for bona fide dealer demonstrations furnished without fee to business invitees. However, if on the basis of substantial evidence the Secretary determines, pursuant to section 6 hereof, that requiring vessels so used to be under the control of licensed persons is necessary to meet the need for boating safety, then the Secretary may promulgate regulations requiring the licensing of persons controlling such vessels in the same manner as provided in section 12(e) of this Act for persons in control of vessels carrying passengers for hire.

#### TERMINATION OF UNSAFE USE

SEC. 13. If a Coast Guard boarding officer observes a boat being used without sufficient lifesaving or firefighting devices or in an overloaded or other unsafe condition as defined in regulations of the Secretary, and in his judgment such use creates an especially hazardous condition, he may direct the operator to take whatever immediate and reasonable steps would be necessary for the safety of those aboard the vessel, including directing the operator to return to mooring and to remain there until the situation creating the hazard is corrected or ended.

#### INSPECTION, INVESTIGATION, REPORTING

SEC. 14. (a) Every manufacturer subject to the provisions of this Act shall establish and maintain records, make reports, and provide information as the Secretary may reasonably require to enable him to determine whether the manufacturer has acted or is acting in compliance with this Act and the regulations issued thereunder. A manufacturer shall, upon request of an officer, employee, or agent authorized by the Secretary, permit the officer, employee, or agent to inspect at reasonable times factories or other facilities, books, papers, records, and documents relevant to determining whether the manufacturer has acted or is acting in compliance with this Act and the regulations issued thereunder.

(b) All information reported to or otherwise obtained by the Secretary or his representative pursuant to subsection (a) of this section containing or relating to a trade secret or other matter referred to in section 1905 of title 18 of the United States Code, or authorized to be exempted from public disclosure by subsection 552(b) of title 5, United States Code, shall be considered confidential for the purpose of that section of title 18, except that, upon approval by the Secretary,

such information may be disclosed to other officers, employees, or agents concerned with carrying out this Act or when relevant in any proceeding under this Act.

#### NOTIFICATION OF DEFECTS; REPAIR OR REPLACEMENT

SEC. 15. (a) Every manufacturer who discovers or acquires information which he determines, in the exercise of reasonable and prudent judgment, indicates that a boat or associated equipment subject to an applicable standard or regulation prescribed pursuant to section 5 of this Act either fails to comply with such standard or regulation, or contains a defect which creates a substantial risk of personal injury to the public, shall, if such boat or associated equipment has left the place of manufacture, furnish notification of such defect or failure of compliance as provided in subsections (b) and (c) of this section, within a reasonable time after the manufacturer has discovered the defect: *Provided*, That the manufacturer's duty of notification under subsection (b)(1) and subsection (b)(2) of this section applies only to defects or failures of compliance discovered by the manufacturer within one of the following periods, as appropriate:

(1) in the case of a boat or associated equipment required by regulation to have a date of certification affixed, five years from date of certification, or

(2) in the case of a boat or associated equipment not required by regulation to have a date of certification affixed, five years from date of manufacture.

(b) The notification required by subsection (a) of this section shall be given to the following persons in the following manner -

(1) by certified mail to the first purchaser for purposes other than resale: *Provided*, That the requirement for notification of such first purchaser shall be satisfied if the manufacturer exercises reasonable diligence in creating and maintaining a list of such purchasers and their current addresses and sends the required notice to each person on said list at the address appearing thereon;

(2) by certified mail to subsequent purchasers, if known to the manufacturer;

(3) by certified mail or other more expeditious means to the dealers or distributors of such manufacturer to whom such boat or associated equipment was delivered.

(c) The notification required by subsection (a) of this section shall contain a clear description of such defect or failure to comply, an evaluation of the hazard reasonably related thereto, a statement of the measures to be taken to correct such defect or failure to comply, and an undertaking by the manufacturer to take such measures at his sole cost and expense.

(d) Every manufacturer shall furnish to the Secretary a true or representative copy of all notices, bulletins, and other communications to dealers or distributors of such manufacturer or to purchasers, or subsequent purchasers, of boats or associated equipment of such manufacturer, regarding any defect relating to safety in such boats or associated equip-

ment or any failure to comply with a standard, regulation, or order applicable to such boat or associated equipment. The Secretary may publish or otherwise disclose to the public so much of the information contained in such notices or other information in his possession as he deems will assist in carrying out the purposes of this Act, but shall not disclose any information which contain or relates to a trade secret unless he determines that it is necessary to carry out the purposes of this Act.

(e) If through testing, inspection, investigation, research, or examination of reports carried out pursuant to this Act the Secretary determines that any boat or associated equipment subject to this Act -

(1) fails to comply with an applicable standard or regulation prescribed pursuant to section 5; or

(2) contains a defect which relates to safety,

and if the Secretary determines that notification provided under this section is appropriate, he shall notify the manufacturer of the boat or associated equipment of such defect or failure to comply. The notice shall contain the findings of the Secretary and shall include a synopsis of the information upon which the findings are based. If the manufacturer receives notice from the Secretary within the time in which he would be required to make notification under subsection (a), upon receipt of such notice, the manufacturer shall furnish the notification described in subsection (c) to the persons designated in subsection (b), unless the manufacturer disputes the Secretary's determination, in which case the Secretary shall afford such manufacturer an opportunity to present his views to establish that there is no failure of compliance or defect relating to safety. Where the Secretary determines it is in the public interest, he may publish notice of such proceeding in the Federal Register and afford interested persons, including the Boating Safety Advisory Council, an opportunity to comment thereon. If after such presentation by the manufacturer the Secretary determines that such boat or associated equipment does not comply with an applicable standard or regulation, or that it contains a defect related to safety, the Secretary may direct the manufacturer to furnish the notification specified in subsection (c) of this section to the persons specified in subsection (b) of this section.

(f) For purposes of section 15, the term "associated equipment" includes only such items or classes of associated equipment as the Secretary shall by regulation or order prescribe after determining that the application of the requirements of this section to such items or classes of associated equipment is reasonable, appropriate, and in furtherance of the purposes of this Act.

(g) The Secretary is authorized to promulgate regulations defining and establishing procedures and otherwise furthering the purposes of this section, including, but not limited to, procedures to be followed by dealers and distributors to assist manufacturers in obtaining the information required by this section: *Provided*, That a regulation promulgated hereunder may not relieve a manufacturer of any obligation imposed on him by this section.

## RENDERING OF ASSISTANCE IN CASUALTIES

SEC. 16. (a) The operator of a vessel, including one otherwise exempted by subsection 4 (c) of this Act, involved in a collision, accident, or other casualty, to the extent he can do so without serious danger to his own vessel, or persons aboard, shall render all practical and necessary assistance to persons affected by the collision, accident, or casualty to save them from danger caused by the collision, accident, or casualty. He shall also give his name, address, and the identification of his vessel to any person injured and to the owner of any property damaged. The duties imposed by this subsection are in addition to any duties otherwise imposed by law.

(b) Any person who complies with subsection (a) of this section or who gratuitously and in good faith renders assistance at the scene of a vessel collision, accident, or other casualty without objection of any person assisted, shall not be held liable for any civil damages as a result of the rendering of assistance or for any act or omission in providing or arranging salvage, towage, medical treatment, or other assistance where the assisting person acts as an ordinary, reasonably prudent man would have acted under the same or similar circumstances.

## NUMBERING OF CERTAIN VESSELS

### VESSELS REQUIRING NUMBERING

SEC. 17. An undocumented vessel equipped with propulsion machinery of any type shall have a number issued by the proper issuing authority in the State in which the vessel is principally used.

### STANDARD NUMBERING

SEC. 18. (a) The Secretary shall establish by regulation a standard numbering system for vessels. Upon application by a State the Secretary shall approve a State numbering system which is in accord with the standard numbering system and the provisions of this Act relating to numbering and casualty reporting. In implementing and administering its numbering system, a State shall adopt any definitions of relevant terms, including, but not limited to, 'model year' and 'date of manufacture' established by the Secretary by regulation. A State with an approved system is the issuing authority under the Act. The Secretary is the issuing authority in States where a State numbering system has not been approved.

(b) If a State has a numbering system approved by the Secretary under the Act of September 2, 1958 (72 Stat. 1754), as amended, prior to enactment hereof, the system need not be immediately revised to conform with this Act and may continue to effect without change for a period not to exceed three years from the date of enactment of this Act.

(c) When a vessel is actually numbered in the State of principal use, it shall be considered as in compliance with the numbering system requirements of any State in which it is temporarily used.

(d) When a vessel is removed to a new State of principal use, the



issuing authority of that State shall recognize the validity of a number awarded by any other issuing authority for a period of at least sixty days before requiring numbering in the new State.

(e) If a State has a numbering system approved after the effective date of this Act, that State must accept and recognize any certificate of number issued by the Secretary, as the previous issuing authority in that State, for one year from the date that State's system is approved, or until its expiration date, at the option of the State.

(f) Whenever the Secretary determines that a State is not administering its approved numbering system in accordance with the standard numbering system, or has altered its system without his approval, he may withdraw his approval after giving notice to the State, in writing, setting forth specifically wherein the State has failed to meet the standards required, and the State has not corrected such failures within a reasonable time after being notified by the Secretary.

#### EXEMPTIONS

SEC. 19. (a) The Secretary, when he is the issuing authority, may exempt a vessel or class of vessels from the numbering provisions of this Act under such conditions as he may prescribe.

(b) When a State is the issuing authority, it may exempt from the numbering provisions of this Act any vessel or class of vessels that has been exempted under subsection (a) of this section or otherwise as permitted by the Secretary.

#### DESCRIPTION OF CERTIFICATE OF NUMBER

SEC. 20. (a) A certificate of number granted under this Act shall be pocket size, shall be at all times available for inspection on the vessel for which issued when the vessel is in use, and may not be valid for more than three years. The certificate of number for vessels less than twenty-six feet in length and leased or rented to another for the latter's noncommercial use of less than seven days may be retained on shore by the vessel's owner or his representative at the place from which the vessel departs or returns to the possession of the owner or his representative. A vessel which does not have the certificate of number on board shall be identified while in use, and comply with such other requirements, as the issuing authority prescribes.

(b) The owner of a vessel numbered under this Act shall furnish to the issuing authority notice of the transfer of all or part of his interest in the vessel, or of the destruction or abandonment of the vessel, within a reasonable time thereof, and shall furnish notice of any change of address within a reasonable time of the change, in accordance with prescribed regulations.

#### DISPLAY OF NUMBER

SEC. 21. A number required by this Act shall be painted on, or attached to, each side of the forward half of the vessel for which it was issued, and shall be of the size, color, and type as may be prescribed by the Secretary. No other number may be carried on the forward half of the vessel.

## SAFETY CERTIFICATES

SEC. 22. When a State is the issuing authority it may require that the operator of a numbered vessel hold a valid safety certificate issued under terms and conditions set by the issuing authority.

## REGULATIONS

SEC. 23. The issuing authority may prescribe regulations and establish fees to carry out the intent of sections 17 through 24 and section 37 of this Act. The fees established pursuant to authority granted by this section shall apply equally to residents and nonresidents of the State. A State issuing authority may impose only terms and conditions for vessel numbering (1) which are prescribed by this Act or the regulations of the Secretary concerning the standard numbering system, or (2) which relate to proof of payment of State or local taxes.

## FURNISHING OF INFORMATION

SEC. 24. Any person may request from an issuing authority vessel numbering and registration information which is retrievable from vessel numbering system records of the issuing authority. When the issuing authority is satisfied that the request is reasonable and related to a boating safety purpose, the information shall be furnished upon payment by such person of the cost of retrieval and furnishing of the information requested.

## STATE BOATING SAFETY PROGRAMS

### ESTABLISHMENT AND ACCEPTANCE

SEC. 25. In order to encourage greater State participation and consistency in boating safety efforts, and particularly greater safety patrol and enforcement activities, the Secretary may accept State boating safety programs directed at implementing and supplementing this Act. Acceptance is necessary for a State to receive full rather than partial Federal financial assistance under this Act. The Secretary may also make Federal funds available to an extent permitted by subsection 27 (d) of this Act to national nonprofit public service organizations for national boating safety programs and activities which he considers to be in the public interest.

### BOATING SAFETY PROGRAM CONTENT

SEC. 26. (a) The Secretary shall accept a State boating safety program which -

- (1) incorporates a State vessel numbering system previously approved under this Act or includes such a numbering system as part of the proposed boating safety program;
- (2) includes generally the other substantive content of the

Model State Boat Act as approved by the National Association of State Boating Law Administrators in conjunction with the Council of State Governments, or is in substantial conformity therewith, or conforms sufficiently to insure uniformity and promote comity among the several jurisdictions;

(3) provides for patrol and other activity to assure enforcement of the State boating safety laws and regulations;

(4) provides for boating safety education programs;

(5) designates the State authority or agency which will administer the boating safety program and the allocated Federal funds; and

(6) provides that the designated State authority or agency will submit reports in the form prescribed by the Secretary.

(b) The requirements of subparagraph (a) (2) of this section shall be liberally construed to permit acceptance where the general intent and purpose of such requirements are met and nothing contained therein is in any way intended to discourage a State program which is more extensive or comprehensive than suggested herein, particularly with the regard to safety patrol and enforcement activity commensurate with the amount and type of boating activity within the State, and with regard to public boat safety education, and experimental programs which could enhance boating safety.

#### ALLOCATION OF FEDERAL FUNDS

SEC. 27. (a) The Secretary shall allocate the amounts appropriated to the several States as soon as practicable after October 1 of each fiscal year for which the funds are appropriated.

(b) In order to encourage and assist the States in the development of boating safety programs during the first three fiscal years for which funds are available under this Act, the funds shall be allocated among applying States having a boating safety program, or which indicate to the Secretary their intention to establish boating safety programs in accordance with section 25 of this Act. One-half of the funds shall be allocated equally among the applying States. The other half shall be allocated to each applying State in the same ratio as the number of vessels propelled by machinery numbered in that State bears to the number of such vessels numbered in all applying States.

(c) In fiscal years after the third fiscal year for which funds are available under this Act the moneys appropriated shall be allocated among applying States. Of the total available funds one-third shall be allocated each year equally among applying States. One-third shall be allocated so that the amount each year to each applying eligible State will be in the same ratio as the number of vessels numbered in that State, under a numbering system approved under this Act, bears to the number of such vessels numbered in all applying eligible States. The remaining one-third shall be allocated so that the amount each year to each applying eligible State shall be in the same ratio as the State funds expended or obligated for the State boating safety program during the previous fiscal year by a State bears to the total State funds expended or obligated for that fiscal year by all the applying eligible States.

(d) The Secretary may allocate not more than 5 per centum of funds appropriated in any fiscal year for national boating safety activities of one or more national nonprofit-public service organizations.

#### ALLOCATION LIMITATIONS; UNOBLIGATED OR UNALLOCATED FUNDS

SEC. 28. (a) Notwithstanding the allocation ratios prescribed in section 27, the Federal funds allocated to any State in any fiscal year may not exceed fifty per centum of the total cost of that State's boating safety program in that year. No State may receive more than 5 per centum of the Federal funds appropriated or available for allocation in any fiscal year.

(b) Amounts allocated to a State shall be available for obligation by that State for a period of three years following the date of allocation. Funds unobligated by the State at the expiration of the three-year period shall be withdrawn by the Secretary and shall be available with other funds to be allocated by the Secretary during that fiscal year.

(c) Funds available to the Secretary which have not been allocated at the end of a fiscal year shall be carried forward as part of the total allocation funds for the next fiscal year for which appropriations are authorized by this Act.

(d) For the purposes of this section, the transition period of July 1, 1976, to September 30, 1976, shall be treated as a fiscal year.

#### DETERMINATION OF STATE FUNDS EXPENDED

SEC. 29. In accordance with regulations prescribed by the Secretary computation by a State of funds expended or obligated for the boating safety program shall include the acquisition, maintenance, and operating costs of facilities, equipment, and supplies; personnel salaries and reimbursable expenses; the costs of training personnel; public boat safety education; the costs of administering the program; and other expenses which the Secretary considers appropriate. The Secretary shall determine any issues which arise in connection with such computation.

#### AUTHORIZATION FOR APPROPRIATIONS FOR STATE BOATING SAFETY PROGRAMS

SEC. 30. For the purpose of providing financial assistance for State boating safety programs there is authorized to be appropriated \$7,500,000 for the fiscal year ending June 30, 1972, and \$7,500,000 for each of the four succeeding fiscal years, such appropriations to remain available until expended.

#### PAYMENTS

SEC. 31. (a) Amounts allocated under section 27 of this Act shall be computed and paid to the States as follows:

(1) During the first three fiscal years that funds are available the Secretary shall schedule the initial payment to each State at the earliest possible time after application and compliance with subsection 27 (b) of this Act.

(2) For fiscal years after the third fiscal year for which funds are available, the Secretary shall determine during the last

quarter of a fiscal year, on the basis of computations made pursuant to section 29 of this Act and submitted by the States, the percentage of the funds available for the next fiscal year to which each eligible State shall be entitled. Notice of the percentage and of the dollar amount, if it can then be determined, for each State shall be furnished to the States at the earliest practicable time. If the Secretary finds that an amount made available to a State for a prior year is greater or less than the amount which should have been made available to that State for the prior year, because of later or more accurate State expenditure information, the amount for the current fiscal year may be increased or decreased by the appropriate amount.

(b) Notwithstanding any other provision of law, the Secretary shall schedule the payment of funds consistent with the program purposes and applicable Treasury regulations, so as to minimize the time elapsing between the transfer of funds from the United States Treasury and the subsequent disbursement thereof by a State.

(c) Whenever the Secretary, after reasonable notice to the designated State authority or agency, finds that -

(1) the boating safety program submitted by the State and accepted by the Secretary has been so changed that it no longer complies with this Act or standards established by regulations thereunder; or

(2) in the administration of the boating safety program, there has been a failure to comply substantially with the standards established by the regulations;

the Secretary shall notify the State authority or agency that no further payments will be made to the State until the program conforms to the established standards or the failure is corrected.

(d) The Secretary shall, by regulation, provide for such accounting, budgeting, and other fiscal procedures as are necessary and reasonable for the proper and efficient administration of this section. The Secretary and the Comptroller General of the United States shall have access for the purpose of audit and examination, to any books, documents, papers, and records that are pertinent to Federal funds allocated under this Act.

#### CONSULTATION AND COOPERATION

SEC. 32. (a) In carrying out his responsibilities under this Act the Secretary may consult with State and local governments, public and private agencies, organizations and committees, private industry, and other persons having an interest in boating and boating safety.

(b) The Secretary may advise, assist, and cooperate with the States and other interested public and private agencies, in the planning, development, and execution of boating safety programs. Acting under the authority of section 141 of title 14, United States Code, and consonant with the policy defined in section 2 of this Act, the Secretary shall insure the fullest cooperation between the State and

Federal authorities in promoting boating safety by entering into agreements and other arrangements with the State whenever possible. Subject to the provisions of chapter 23, title 14, he may make available, upon request from a State, the services of members of the Coast Guard Auxiliary to assist the State in the promotion of boating safety on State waters.

#### BOATING SAFETY ADVISORY COUNCIL

SEC. 33. (a) The Secretary shall establish a National Boating Safety Advisory Council (hereinafter referred to as "the Council"), which shall not exceed twenty-one members, whom the Secretary considers to have a particular expertise, knowledge, and experience in boating safety. Insofar as practical, to assure balanced representation, members shall be drawn equally from (1) State officials responsible for State boating safety programs, (2) boat and associated equipment manufacturers, and (3) boating organizations and members of the general public. Additional persons from those sources may be appointed to panels to the Council which will assist the Council in the performance of its functions.

(b) In addition to the consultation required by section 6 of this Act the Secretary shall consult with the Council on any other major boat safety matters related to this Act.

(c) Members of the Council or panels may be compensated at a rate not to exceed the rate provided for Federal classified employees of grade GS-18 when engaged in the duties of the Council. Members, while away from their homes or regular places of business, may be allowed travel expenses, including a per diem in lieu of subsistence as authorized by section 5703 of title 5, United States Code, for persons in the Government service employed intermittently. Payments under this section shall not render members of the Council employees or officials of the United States for any purpose.

#### CRIMINAL PENALTIES

SEC. 34. Any person who willfully violates section 12(c) of this Act or the regulations issued thereunder shall be fined not more than \$1000 for each violation or imprisoned not more than one year, or both.

#### CIVIL PENALTIES

SEC. 35. (a) In addition to any other penalty prescribed by law any person who violates subsection 12(a) of this Act shall be liable to a civil penalty of not more than \$2,000 for each violation, except that the maximum civil penalty shall not exceed \$100,000 for any related series of violations. Whenever any corporation violates section 12(a) of this Act, any director, officer, or executive employee of such corporation who knowingly and willfully ordered or knowingly and willfully authorized such violation shall be individually liable to the civil penalties contained herein, in addition to the corporation: *Provided, however, That*

no such director, officer, or executive employee shall be individually liable under this subsection if he can demonstrate, by a preponderance of the evidence, (1) that said order or authorization was issued on the basis of a determination, in the exercise of reasonable and prudent judgment, that the nonconformity with standards and regulations constituting such violation would not cause or constitute a substantial risk of personal injury to the public, and (2) that at the time of said order or authorization he advised the Secretary in writing of his action under this proviso.

(b) In addition to any other penalty prescribed by law any person who violates any other provision of this Act or the regulations issued thereunder shall be liable to a civil penalty of not more than \$500 for each violation. If the violation involves the use of a vessel, the vessel, except as exempted by subsection 4(c) of this Act, shall be liable and may be proceeded against in the district court of any district in which the vessel may be found.

(c) The Secretary may assess and collect any civil penalty incurred under this Act and, in his discretion, remit, mitigate, or compromise any penalty prior to referral to the Attorney General. Subject to approval by the Attorney General, the Secretary may engage in any proceeding in court for that purpose, including a proceeding under subsection (d) of this section. In determining the amount of any penalty to be assessed hereunder, or the amount agreed upon in any compromise, consideration shall be given to the appropriateness of such penalty in light of the size of the business of the person charged, the gravity of the violation and the extent to which the person charged has complied with the provisions of section 15 of this Act or has otherwise attempted to remedy the consequences of the said violation.

(d) When a civil penalty of not more than \$200 has been assessed under this Act, the Secretary may refer the matter for collection of the penalty directly to the Federal magistrate of the jurisdiction wherein the person liable may be found for collection procedures under supervision of the district court and pursuant to order issued by the court delegating such authority under section 636(b) of title 28, United States Code.

#### INJUNCTIVE PROCEEDINGS

SEC. 36. The United States district courts shall have jurisdiction to restrain violations of this Act, or to restrain the sale, offer for sale, or the introduction or delivery for introduction, in interstate commerce, or the importation into the United States, of any boat or associated equipment which is determined not to conform to Federal boat safety standards, upon petition by the Attorney General on behalf of the United States. Whenever practicable, the Secretary shall give notice to any person against whom an action for injunctive relief is contemplated and afford him an opportunity to present his views, and except in the case of knowing and willful violation, shall afford him a reasonable opportunity to achieve compliance. The failure to give notice and afford such opportunity does not preclude the granting of appropriate relief.

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#### CASUALTY REPORTING SYSTEMS

SEC. 37. (a) The Secretary shall prescribe a uniform vessel casualty reporting system for vessels subject to this Act, including those otherwise exempted by paragraphs (1), (3), and (4) of section 4(c).

(b) A State vessel numbering system and boating safety program approved under this Act shall provide for the reporting of casualties and accidents involving vessels. A State shall compile and transmit to the Secretary reports, information, and statistics on casualties and accidents reported to it.

(c) A vessel casualty reporting system shall provide for the reporting of all marine casualties involving vessels indicated in subsection (a) of this section and resulting in the death of any person. Marine casualties which do not result in loss of life shall be classified according to the gravity thereof, giving consideration to the extent of the injuries to persons, the extent of property damage, the dangers which casualties create, and the size, occupation or use, and the means of propulsion of the boat involved. Regulations shall prescribe the casualties to be reported and the manner of reporting.

(d) The owner or operator of a boat or vessel indicated in subsection (a) of this section and involved in a casualty or accident shall report the casualty or accident to the Secretary in accordance with regulations prescribed under this section unless he is required to report to a State under a State system approved under this Act.

(e) The Secretary shall collect, analyze, and publish reports, information, or statistics together with such findings and recommendations as he considers appropriate. If a State accident reporting system provides that information derived from accident reports, other than statistical, shall be unavailable for public disclosure, or otherwise prohibits use by the State or any person in any action or proceeding against an individual, the Secretary may utilize the information or material furnished by a State only in like manner.

#### APPROPRIATIONS AUTHORIZATION

SEC. 38. There is authorized to be appropriated amounts as may be necessary to administer the provisions of this Act.

#### GENERAL REGULATIONS

SEC. 39. The Secretary may issue regulations necessary or appropriate to carry out the purposes of this Act.

#### SAVINGS PROVISION

SEC. 40. Compliance with this Act or standards, regulations, or orders promulgated hereunder shall not relieve any person from liability at common law or under State law.



# MISCELLANEOUS PROVISIONS

SEC. 41. (a) The following are repealed:

- (1) Section 7, as amended, and sections 13 and 14 of the Motorboat Act of 1940, Public Law 76-484, April 25, 1940 (54 Stat. 165);
- (2) The Federal Boating Act of 1958, Public Law 85-911, September 2, 1958 (72 Stat. 1754), except subsection 6(b) and 6(c) thereof;
- (3) The Act of March 28, 1960, Public Law 86-396 (74 Stat. 10); and
- (4) The Act of August 30, 1961, Public Law 87-171 (75 Stat. 408).

(b) Subsection (c) of section 6 of the Federal Boating Act of 1958, September 2, 1958 (72 Stat. 1754) is amended to read as follows:

"(c) Such Act of April 25, 1940 (46 U.S.C. 526-526t), is further amended by adding at the end thereof the following new section:

"SEC. 22. (a) This Act applies to every motorboat or vessel on the navigable waters of the United States, Guam, the Virgin Islands, the Commonwealth of Puerto Rico, and the District of Columbia, and every motorboat or vessel owned in a State and using the high seas, except that the provisions of this Act other than sections 12, 18, and 19 do not apply to boats as defined in and subject to the Federal Boat Safety Act of 1971.

"(b) As used in this Act-

"The term "State" means a State of the United States, Guam, the Virgin Islands, the Commonwealth of Puerto Rico, and the District of Columbia."

(c) Any vessel, to the extent that it is subject to the Small Passenger Carrying Vessel Act, May 10, 1956 (70 Stat. 151), or to any other vessel inspection statute of the United States, is exempt from the provisions of this Act.

(d) Nothing contained in this Act shall be deemed to exempt from the antitrust laws of the United States any conduct that would be unlawful under such laws, or to prohibit under the antitrust laws of the United States any conduct that would be lawful under such laws.

(e) Regulations previously issued under statutory provisions repealed, modified, or amended by this Act continue in effect as though promulgated under the authority of this Act until expressly abrogated, modified, or amended by the Secretary under the regulatory authority of this Act.

(f) Any criminal or civil penalty proceeding under the Motorboat Act of 1940, as amended, or the Federal Boating Act of 1958, as amended, for a violation which occurred before the effective date of this Act may be initiated and continue to conclusion as though the former Acts had not been amended or repealed hereby.

**PART 159—MARINE SANITATION DEVICES****Subpart A—General**

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**Subpart D—Recognition of Facilities**

- 159.201** Application.  
**159.205** Criteria for recognition.

**Authority:** Sec. 312(b)(1), 86 Stat. 871 (33 U.S.C. 1822(b)(1)); 49 CFR 1.45(b) and 1.46 (i) and (m).

**Source:** CGD 73-83, 40 FR 4624, Jan. 30, 1975, unless otherwise noted.

**Subpart A—General****§ 159.1 Purpose.**

This part prescribes regulations governing the design and construction of marine sanitation devices and procedures for certifying that marine sanitation devices meet the regulations and the standards of the Environmental Protection Agency promulgated under section 312 of the Federal Water Pollution Control Act (33 U.S.C. 1822), to eliminate the discharge of untreated sewage from vessels into the waters of the United States, including the territorial seas. Subpart A of this part contains regulations governing the manufacture and operation of vessels equipped with marine sanitation devices.

**§ 159.3 Definitions.**

In this part:

(a) "Coast Guard" means the Commandant or his authorized representative.

(b) "Discharge" includes, but is not limited to, any spilling, leaking, pouring, pumping, emitting, emptying, or dumping.

(c) "Existing vessel" includes any vessel, the construction of which was initiated before January 30, 1975.

(d) "Inspected vessel" means any vessel that is required to be inspected under 46 CFR Chapter I.

(e) "Manufacturer" means any person engaged in manufacturing, assembling, or importing of marine sanitation devices or of vessels subject to the standards and regulations promulgated under section 312 of the Federal Water Pollution Control Act.

(f) "Marine sanitation device" and "device" includes any equipment for installation on board a vessel which is designed to receive, retain, treat, or discharge sewage, and any process to treat such sewage.

(g) "New vessel" includes any vessel, the construction of which is initiated on or after January 30, 1975.

(h) "Person" means an individual, partnership, firm, corporation, or association, but does not include an individual on board a public vessel.

(i) "Public vessel" means a vessel owned or bare-boat chartered and operated by the United States, by a State or political subdivision thereof, or by a foreign nation, except when such vessel is engaged in commerce.

(j) "Recognized facility" means any laboratory or facility listed by the Coast Guard as a recognized facility under this part.

(k) "Sewage" means human body wastes and the wastes from toilets and other receptacles intended to receive or retain body waste.

(l) "Territorial seas" means the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and extending seaward a distance of 3 miles.

(m) "Uninspected vessel" means any vessel that is not required to be inspected under 46 CFR Chapter I.

(n) "United States" includes the States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, the Canal Zone, and the Trust Territory of the Pacific Islands.

(o) "Vessel" includes every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on the waters of the United States.

(p) "Fecal coliform bacteria" are those organisms associated with the intestine of warm-blooded animals that are commonly used to indicate the presence of fecal material and the potential presence of organisms capable of causing human disease.

(q) "Type I marine sanitation device" means a device that, under the test conditions described in §§ 159.123 and 159.125, produces an effluent having a fecal coliform bacteria count not greater than 1,000 per 100 milliliters and no visible floating solids.

(r) "Type II marine sanitation device" means a device that, under the test conditions described in §§ 159.126 and 159.126a, produces an effluent having a fecal coliform bacteria count not greater than 200 per 100 milliliters and suspended solids not greater than 150 milligrams per liter.

(s) "Type III marine sanitation device" means a device that is designed to prevent the overboard discharge of treated or untreated sewage or any waste derived from sewage.

[CGD 73-83, 40 FR 4624, Jan. 30, 1975 as amended by CGD 75-213, 41 FR 15325, Apr. 12, 1976]

#### § 159.5 Requirements for vessel manufacturers.

(a) On and after January 30, 1977, no manufacturer may manufacture for sale, offer for sale, or distribute for sale or resale any new vessel equipped with installed toilet facilities unless it is equipped with an operable Type I, II, or III device that has a label placed on it under § 159.16, or that is certified under § 159.12 or § 159.12a.

(b) After January 30, 1980, no manufacturer may manufacture for sale, offer for sale, or distribute for sale or resale any new vessel equipped with installed toilet facilities unless it is equipped with—

(1) An operable Type II or III device that has a label placed on it under § 159.16 or that is certified under § 159.12 or § 159.12a; or

(2) An operable Type I device installed on the vessel before January 31, 1980, that has a label placed on it under § 159.16 or that is certified under § 159.12.

(c) After January 30, 1980, no manufacturer may sell, offer for sale, or distribute for sale or resale any existing vessel equipped with installed toilet facilities unless it is equipped with—

(1) An operable Type II or III device that has a label placed on it under § 159.16 or that is certified under § 159.12 or § 159.12a; or

(2) An operable Type I device installed on the vessel before January 31, 1978, that has a label placed on it under § 159.16 or that is certified under § 159.12.

[CGD 75-213, 41 FR 15325, Apr. 12, 1976]

**§ 159.7 Requirements for vessel operators.**

(a) On and after January 30, 1977, no person may operate any new vessel equipped with installed toilet facilities, unless it is equipped with an operable Type I, II or III device that has a label placed on it under § 159.16, or that is certified under § 159.12 or § 159.12a.

(b) After January 30, 1980, no person may operate any new vessel equipped with installed toilet facilities unless it is equipped with—

(1) An operable Type II or III device that has a label placed on it under § 159.16 or that is certified under § 159.12 or § 159.12a; or

(2) An operable Type I device installed on the vessel before January 31, 1980, that has a label placed on it under § 159.16 or that is certified under § 159.12;

(c) After January 31, 1980, no person may operate any existing vessel equipped with installed toilet facilities unless it is equipped with—

(1) An operable Type II or III device that has a label placed on it under § 159.16 or that is certified under § 159.12 or § 159.12a; or

(2) An operable Type I device installed on the vessel before January 31, 1978, that has a label placed on it under § 159.16 or that is certified under § 159.12.

**NOTE:** The EPA standards state that in freshwater lakes, freshwater reservoirs or other freshwater impoundments whose inlets or outlets are such as to prevent the ingress or egress by vessel traffic subject to this regulation, or in rivers not capable of navigation by interstate vessel traffic subject to this regulation, marine sanitation devices certified by the U.S. Coast Guard installed on all vessels shall be designed and operated to prevent the overboard discharge of sewage, treated or untreated, or of any waste derived from sewage. The EPA standards further state that this shall not be construed to prohibit the carriage of Coast Guard-certified flow-through treatment devices which have been secured so as to prevent such discharges. They also state that waters where a Coast Guard-certified marine sanitation device permitting discharge is allowed include coastal waters and estuaries, the Great Lakes and interconnected waterways, freshwater lakes and impoundments accessible through locks, and other flowing waters that are navigable interstate by vessels subject to this regulation (40 CFR 140.3).

[CGD 75-213, 41 FR 15325, Apr. 12, 1976]

**Subpart B—Certification Procedures****§ 159.11 Purpose.**

This subpart prescribes procedures for certification of marine sanitation devices and authorization for labels on certified devices.

**§ 159.12 Regulations for certification of existing devices.**

(a) The purpose of this section is to provide regulations for certification of existing devices until manufacturers can design and manufacture devices that comply with this part and recognized facilities are prepared to perform the testing required by this part.

(b) Any Type III device that was installed on an existing vessel before January 30, 1975, is considered certified.

(c) Any person may apply to the Commandant (G-MMT/82), U.S. Coast Guard, Washington, D.C. 20590 for certification of a marine sanitation device manufactured before January 30, 1976. The Coast Guard will issue a letter certifying the device if the applicant shows that the device meets § 159.53 by:

(1) Evidence that the device meets state standards at least equal to the standards in § 159.53, or

(2) Test conducted under this part by a recognized laboratory, or

(3) Evidence that the device is substantially equivalent to a device certified under this section, or

(4) A Coast Guard field test if considered necessary by the Coast Guard.

(d) The Coast Guard will maintain and make available a list that identifies each device certified under this section.

(e) Devices certified under this section in compliance with § 159.53 need not meet the other regulations in this part and may not be labeled under § 159.16.

[CGD 73-83, 40 FR 4624, Jan. 30, 1975 as amended by CGD 75-213, 41 FR 15325, Apr. 12, 1976]

**§ 159.12a Certification of certain Type III devices.**

(a) The purpose of this section is to provide regulations for certification of certain Type III devices.

(b) Any Type III device is considered certified under this section if—

(1) It is used solely for the storage of sewage and flushwater at ambient air pressure and temperature; and

(2) It is in compliance with § 159.53(c).

(c) Any device certified under this

section need not comply with the other regulations in this part except as required in paragraphs (b) (2) and (d) of this section and may not be labeled under § 159.16.

(d) Each device certified under this section which is installed aboard an inspected vessel must comply with § 159.97.

**§ 159.13 [Reserved]**

**§ 159.14 Application for certification.**

(a) Any manufacturer may apply to any recognized facility for certification of a marine sanitation device. The application for certification must indicate whether the device will be used aboard all vessels or only aboard uninspected vessels and to which standard in § 159.53 the manufacturer requests the device to be tested.

(b) An application may be in any format but must be in writing and must be signed by an authorized representative of the manufacturer and include or be accompanied by:

(1) A complete description of the manufacturer's production quality control and inspection methods, record keeping systems pertaining to the manufacture of marine sanitation devices, and testing procedures;

(2) The design for the device, including drawings, specifications and other information that describes the materials, construction and operation of the device;

(3) The installation, operation, and maintenance instructions for the device; and

(4) The name and address of the applicant and the manufacturing facility.

(c) The manufacturer must furnish the recognized facility one device of each model for which certification is requested and samples of each material from which the device is constructed, that must be tested destructively under § 159.117. The device furnished is for the testing required by this part except that, for devices that are not suited for unit testing, the manufacturer may submit the design so that the recognized facility may determine the components of the device and materials to be submitted for testing and the tests to be performed at a place other than the facility. The Coast Guard must review and accept all such determinations before testing is begun.

(d) At the time of submittal of an application to a recognized facility the manufacturer must notify the Coast Guard of the type and model of the device, the name of the recognized facility to which application is being made, and the name and address of the manufacturer, and submit a signed statement of the times when the manufacturer will permit designated officers and employees of the Coast Guard to have access to the manufacturer's facilities and all records required by this part.

[CGD 73-83, 40 FR 4624, Jan. 30, 1975 as amended by CGD 75-213, 41 FR 15325, Apr. 12, 1976]

#### § 159.15 Certification.

(a) The recognized facility must evaluate the information that is submitted by the manufacturer in accordance with § 159.14(b) (1), (2), and (3), evaluate the device for compliance with § 159.53 through § 159.95, test the device in ac-

cordance with § 159.101 and submit to the Commandant (G-MMT/82), U.S. Coast Guard, Washington, D.C. 20590 the following:

(1) The information that is required under § 159.14(b);

(2) A report on compliance evaluation;

(3) A description of each test;

(4) Test results; and

(5) A statement, that is signed by the person in charge of testing, that the test results are accurate and complete.

(b) The Coast Guard certifies a test device, on the design of the device, if it determines, after consideration of the information that is required under paragraph (a) of this section, that the device meets the requirements in Subpart C of this part.

(c) The Coast Guard notifies the manufacturer and recognized facility of its determination under paragraph (b) of this section. If the device is certified, the Coast Guard includes a certification number for the device. If certification is denied, the Coast Guard notifies the manufacturer and recognized facility of the requirements of this part that are not met. The manufacturer may appeal a denial to the Commandant (G-MMT/82), U.S. Coast Guard, Washington, D.C. 20590.

(d) If upon re-examination of the test device, the Coast Guard determines that the device does not in fact comply with the requirements of Subpart C of this part, it may terminate the certification.

[CGD 73-83, 40 FR 4624, Jan. 30, 1975; CGD 75-213, 41 FR 15325, Apr. 12, 1976]

#### § 159.16 Authorization to label devices.

(a) When a test device is certified under § 159.15(b), the Coast Guard will issue a letter that authorizes the manufacturer to label each device that he manufactures with the manufacturer's certification that the device is in all material respects substantially the same as a test device certified by the U.S. Coast Guard pursuant to section 312 of the Federal Water Pollution Control Act Amendments of 1972.

(b) Certification placed on a device by its manufacturer under this section is the certification required by section 312(h)(4) of the Federal Water Pollution Control Act Amendments of 1972, which makes it unlawful for a vessel that is subject to the standards and regulations promulgated under the Act to operate on the navigable waters of the

United States, if such vessel is not equipped with an operable marine sanitation device certified pursuant to section 312 of the Act.

(c) Letters of authorization issued under this section are valid for 5 years, unless sooner suspended, withdrawn, or terminated and may be reissued upon written request of the manufacturer to whom the letter was issued.

(d) The Coast Guard, in accordance with the procedure in 46 CFR 2.75, may suspend, withdraw, or terminate any letter of authorization issued under this section if the Coast Guard finds that the manufacturer is engaged in the manufacture of devices labeled under this part that are not in all material respects substantially the same as a test device certified pursuant to this part.

#### § 159.17 Changes to certified devices.

(a) The manufacturer of a device that is certified under this part shall notify the Commandant (G-MMT/82), U.S. Coast Guard, Washington, D.C. 20590 in writing of any change in the design of the device.

(b) A manufacturer shall include with a notice under paragraph (a) of this section a description of the change, its advantages, and the recommendation of the recognized facility as to whether the device remains in all material respects substantially the same as the original test device.

(c) After notice under paragraph (a) of this section, the Coast Guard notifies the manufacturer and the recognized facility in writing of any tests that must be made for certification of the device or for any change in the letter of authorization. The manufacturer may appeal this determination to the Commandant (G-MMT/82), U.S. Coast Guard, Washington, D.C. 20590.

#### § 159.19 Testing equivalency.

(a) If a test required by this part may not be practicable or necessary, a manufacturer may apply to the Commandant (G-MMT/82), U.S. Coast Guard, Washington, D.C. 20590 for deletion or approval of an alternative test as equivalent to the test requirements in this part. The application must include the manufacturer's justification for deletion or the alternative test and any alternative test data.

(b) The Coast Guard notifies the manufacturer of its determination under

paragraph (a) of this section and that determination is final.

### Subpart C—Design, Construction, and Testing

#### § 159.51 Purpose and scope.

(a) This subpart prescribes regulations governing the design and construction of marine sanitation devices.

(b) Unless otherwise authorized by the Coast Guard each device for which certification under this part is requested must meet the requirements of this subpart.

#### § 159.53 General requirements.

A device must:

(a) Under the test conditions described in §§ 159.123 and 159.125, produce an effluent having a fecal coliform bacteria count not greater than 1,000 per 100 milliliters and no visible floating solids (Type I),

(b) Under the test conditions described in §§ 159.126 and 159.126a, produce an effluent having a fecal coliform bacteria count not greater than 200 per 100 milliliters and suspended solids not greater than 150 milligrams per liter (Type II), or

(c) Be designed to prevent the overboard discharge of treated or untreated sewage or any waste derived from sewage (Type III).

[CGD 73-83, 40 FR 4624, Jan. 30, 1975; as amended by CGD 75-213, 41 FR 15325, Apr. 12, 1976]

#### § 159.55 Identification.

(a) Each production device must be legibly marked in accordance with paragraph (b) of this section with the following information:

(1) The name of the manufacturer.

(2) The name and model number of the device.

(3) The month and year of completion of manufacture.

(4) Serial number.

(5) Whether the device is certified for use on an inspected or an uninspected vessel.

(6) Whether the device is Type I, II, or III.

(b) The information required by paragraph (a) of this section must appear on a nameplate attached to the device or in lettering on the device. The nameplate or lettering stamped on the device must be capable of withstanding without loss of legibility the combined effects of normal wear and tear and exposure to water, salt

spray, direct sunlight, heat, cold, and any substance listed in § 159.117 (b) and (c). The nameplate and lettering must be designed to resist efforts to remove them from the device or efforts to alter the information stamped on the nameplate or the device without leaving some obvious evidence of the attempted removal or alteration.

[CGD 73-83, 40 FR 4624, Jan. 30, 1975; as amended by CGD 75-213, 41 FR 15325, Apr. 12, 1976]

**§ 159.57 Installation, operation, and maintenance instructions.**

(a) The instructions supplied by the manufacturer must contain directions for each of the following:

(1) Installation of the device in a manner that will permit ready access to all parts of the device requiring routine service and that will provide any fire clearance necessary for fire safety.

(2) Safe operation and servicing of the device so that any discharge meets the applicable requirements of § 159.53.

(3) Cleaning, winter layup, and ash or sludge removal.

(4) Installation of a vent or flue pipe.

(5) The type and quantity of chemicals that are required to operate the device, including instructions on the proper handling, storage and use of these chemicals.

(6) Recommended methods of making required plumbing and electrical connections including fuel connections and supply circuit overcurrent protection.

(b) The instructions supplied by the manufacturer must include the following information:

(1) The name of the manufacturer.

(2) The name and model number of the device.

(3) Whether the device is certified for use on an inspected, or uninspected vessel.

(4) A complete parts list.

(5) A schematic diagram showing the relative location of each part.

(6) A wiring diagram.

(7) A description of the service that may be performed by the user without coming into contact with sewage or chemicals.

(8) Average and peak capacity of the device for the flow rate, volume, or number of persons that the device is capable of serving and the period of time the device is rated to operate at peak capacity.

(9) The power requirements, including voltage and current.

(10) The type and quantity of fuel required.

(11) The duration of the operating cycle for unitized incinerating devices.

(12) The maximum angles of pitch and roll at which the device operates in accordance with the applicable requirements of § 159.53.

(13) Whether the device is designed to operate in salt, fresh, or brackish water.

(14) The maximum hydrostatic pressure at which a pressurized sewage retention tank meets the requirements of § 159.111.

(15) The maximum operating level of liquid retention components.

(16) Whether the device is Type I, II, or III.

(17) A statement as follows:

**NOTE:** The EPA standards state that in freshwater lakes, freshwater reservoirs or other freshwater impoundments whose inlets or outlets are such as to prevent the ingress or egress by vessel traffic subject to this regulation, or in rivers not capable of navigation by interstate vessel traffic subject to this regulation, marine sanitation devices certified by the U.S. Coast Guard installed on all vessels shall be designed and operated to prevent the overboard discharge of sewage, treated or untreated, or of any waste derived from sewage. The EPA standards further state that this shall not be construed to prohibit the carriage of Coast Guard-certified flow-through treatment devices which have been secured so as to prevent such discharges. They also state that waters where a Coast Guard-certified marine sanitation device permitting discharge is allowed include coastal waters and estuaries, the Great Lakes and interconnected waterways, freshwater lakes and impoundments accessible through locks, and other flowing waters that are navigable interstate by vessels subject to this regulation (40 CFR 140.3).

[CGD 73-83, 40 FR 4624, Jan. 30, 1975; as amended by CGD 75-213, 41 FR 15325, Apr. 12, 1976]

**§ 159.59 Placard.**

Each device must have a placard suitable for posting on which is printed the operating instructions, safety precautions, and warnings pertinent to the device. The size of the letters printed on the placard must be one-eighth of an inch or larger.

**§ 159.61 Vents.**

Vents must be designed and constructed to minimize clogging by either the contents of the tank or climactic conditions such as snow or ice.



**§ 159.63 Access to parts.**

Each part of the device that is required by the manufacturer's instructions to be serviced routinely must be readily accessible in the installed position of the device recommended by the manufacturer.

**§ 159.65 Chemical level indicator.**

The device must be equipped with one of the following:

(a) A means of indicating the amount in the device of any chemical that is necessary for its effective operation.

(b) A means of indicating when chemicals must be added for the proper continued operation of the device.

**§ 159.67 Electrical component ratings.**

Electrical components must have current and voltage ratings equal to or greater than the maximum load they may carry.

**§ 159.69 Motor ratings.**

Motors must be rated to operate at 50° C ambient temperature.

**§ 159.71 Electrical controls and conductors.**

Electrical controls and conductors must be installed in accordance with good marine practice. Wire must be copper and must be stranded. Electrical controls and conductors must be protected from exposure to chemicals and sewage.

**§ 159.73 Conductors.**

Current carrying conductors must be electrically insulated from non-current carrying metal parts.

**§ 159.75 Overcurrent protection.**

Overcurrent protection must be provided within the unit to protect subcomponents of the device if the manufacturer's recommended supply circuit overcurrent protection is not adequate for these subcomponents.

**§ 159.79 Terminals.**

Terminals must be solderless lugs with ring type or captive spade ends, must have provisions for being locked against movement from vibration, and must be marked for identification on the wiring diagram required in § 159.57. Terminal blocks must be nonabsorbent and securely mounted. Terminal blocks must be provided with barrier insulation that

prevents contact between adjacent terminals or metal surfaces.

**§ 159.81 Baffles.**

Baffles in sewage retention tanks, if any, must have openings to allow liquid and vapor to flow freely across the top and bottom of the tank.

**§ 159.83 Level indicator.**

Each sewage retention device must have a means of indicating when the device is more than  $\frac{3}{4}$  full by volume.

**§ 159.85 Sewage removal.**

The device must be designed for efficient removal of nearly all of the liquid and solids in the sewage retention tank.

**§ 159.87 Removal fittings.**

If sewage removal fittings or adapters are provided with the device, they must be of either 1½" or 4" nominal pipe size.

**§ 159.89 Power interruption: Type I and II devices.**

A discharge device must be designed so that a momentary loss of power during operation of the device does not allow a discharge that does not meet the requirements in § 159.53.

[CGD 73-83, 40 FR 4624, Jan. 30, 1975; as amended by CGD 75-213, 41 FR 15326, Apr. 12, 1976]

**§ 159.93 Independent supporting.**

The device must have provisions for supporting that are independent from connecting pipes.

**§ 159.95 Safety.**

(a) Each device must—

(1) Be free of design defects such as rough or sharp edges that may cause bodily injuries or that would allow toxic substances to escape to the interior of the vessel;

(2) Be vented or provided with a means to prevent an explosion or over pressurization as a result of an accumulation of gases; and

(3) Meet all other safety requirements of the regulations applicable to the type of vessel for which it is certified.

(b) A chemical that is specified or provided by the manufacturer for use in the operation of a device and is defined as a hazardous material in 46 CFR Part 146 must be certified by the procedures in 46 CFR Part 147.

(c) Current carrying components must be protected from accidental contact by

personnel operating or routinely servicing the device. All current carrying components must as a minimum be of drip-proof construction or be enclosed within a drip-proof compartment.

#### § 159.97 Safety: inspected vessels.

The Commandant approves the design and construction of devices to be certified for installation and operation on board inspected vessels on the basis of tests and reports of inspection under the applicable marine engineering requirements in Subchapter F of Title 46, Code of Federal Regulations, and under the applicable electrical engineering requirements in Subchapter J of Title 46 Code of Federal Regulations.

[CGD 73-83, 40 FR 4624, Jan. 30, 1975; as amended by CGD 75-213, 41 FR 15326, Apr. 12, 1976]

#### § 159.101 Testing: general.

Unless otherwise authorized by the Coast Guard, a recognized facility must perform each test described in §§ 159.103 through 159.131. The same device must be used for each test and tested in the order in which the tests are described. There must be no cracking, softening, deterioration, displacement, breakage, leakage or damage of components or materials that affects the operation or safety of the device after each test described in §§ 159.103 through 159.117 and § 159.121, and the device must remain operable after the test described in § 159.119. The device must be set up in a manner simulating installation on a vessel in accordance with the manufacturer's instructions with respect to mounting, water supply, and discharge fittings.

[CGD 73-83, 40 FR 4624, Jan. 30, 1975; as amended by CGD 75-213, 41 FR 15326, Apr. 12, 1976]

#### § 159.103 Vibration test.

The device, with liquid retention components, if any, filled with water to one-half of their volume, must be subjected to a sinusoidal vibration for a period of 12 hours, 4 hours in each of the x, y, and z planes, at the resonant frequency of the device (or at 55 cycles per second if there is no resonant frequency between 10 to 60 hertz) and with a peak amplitude of 0.019 to 0.021 inches.

#### § 159.105 Shock test.

The device, with liquid retention components, if any, filled with water to half of their volume, must be subjected to

1,000 vertical shocks that are ten times the force of gravity (10g) and have a duration of 20-25 milliseconds measured at the base of the half-sine shock envelope.

#### § 159.107 Rolling test.

(a) The device, with liquid retention components, if any, filled with water to half of their volume, must be subjected to 100 cycles with the axis of rotation 4 feet from the centerline of the device, no more than 6 inches below the plane of the bottom of the device, and parallel to any tank baffles. The device must then be rotated 90 degrees on its vertical axis and subjected to another 100 cycles. This testing must be repeated with the liquid retention components filled to the maximum operating level as specified by the manufacturer in § 159.57.

(b) Eighty percent of the rolling action must be approximately 15 degrees on either side of the vertical and at a cyclic rate of 3 to 4 seconds. Twenty percent motions must be approximately 30 degrees, or the maximum angle specified by the manufacturer under § 159.57, whichever is greater, on either side of the vertical at a cyclic rate of 6 to 8 seconds.

#### § 159.109 Pressure test.

Any sewage retention tank that is designed to operate under pressure must be pressurized hydrostatically at a pressure head of 7 feet or to 150 percent of the maximum pressure specified by the manufacturer for operation of the tank, whichever is greater. The tank must hold the water at this pressure for 1 hour with no evidence of leaking.

#### § 159.111 Pressure and Vacuum Pulse test.

Liquid retention components of the device with manufacturer specified venting installed must be subjected to 50 fillings of water at a pressure head of 7 feet or the maximum pressure specified by the manufacturer for operation of the device, whichever is greater, and then emptied with a 45 gallon per minute or larger positive displacement pump that remains in operation 30 seconds after emptying the tank at the end of each cycle.

#### § 159.115 Temperature range test.

(a) The device must be held at a temperature of 60° C or higher for a period of 16 hours.

(b) The device must be held at a temperature of  $-40^{\circ}\text{C}$  or less for a period of 16 hours following winterization in accordance with manufacturers' instructions.

**§ 159.117 Chemical resistance test.**

(a) In each case where the recognized facility doubts the ability of a material to withstand exposure to the substances listed in paragraphs (b) and (c) of this section a sample of the material must be tested.

(b) A sample referred to in paragraph (a) of this section must be partially submerged in each of the following substances for 100 hours at an ambient temperature of  $22^{\circ}\text{C}$ .

- (1) Sewage.
- (2) Any disinfectant that is required in the operation of the device.
- (3) Any chemical compound in solid, liquid or gaseous form, used, emitted or produced in the operation of the device.
- (4) Fresh or salt (3.5 percent Sodium Chloride) flush water.
- (5) Toilet bowl cleaners.
- (6) Engine Oil (SAE # 30).
- (7) Ethylene Glycol.
- (8) Detergents (household and bilge cleaning type).

(c) A sample of the material must be doused 20 times, with a 1 hour drying period between dousings, in each of the following substances:

- (1) Gasoline.
- (2) Diesel fuel.
- (3) Mineral spirits.
- (4) Turpentine.
- (5) Methyl alcohol.

**§ 159.119 Operability test; temperature range.**

The device must operate in an ambient temperature of  $5^{\circ}\text{C}$  with inlet operating fluid temperature varying from  $2^{\circ}\text{C}$  to  $32^{\circ}\text{C}$  and in an ambient temperature of  $50^{\circ}\text{C}$  with inlet operating fluid temperature varying from  $2^{\circ}\text{C}$  to  $32^{\circ}\text{C}$ .

**§ 159.121 Sewage processing test.**

(a) The device must process human sewage in the manner for which it is designed when tested in accordance with this section. There must be no sewage or sewage-treating chemicals remaining on surfaces or in crevices that could come in contact with a person using the device or servicing the device in accordance

with the instructions supplied under § 159.57(b) (7).

(b) During the test the device must be operated and maintained in accordance with the manufacturer's instructions. Any initial start-up time specified by the manufacturer must be allowed before tests periods begin. For 1 hour of each 8-hour test period, the device must be tilted to the maximum angles specified by the manufacturer under §§ 159.55 and 159.57.

(c) Except for devices described in paragraph (d) of this section, the devices must process and discharge or store human sewage over at least an 8-consecutive hour period on at least 10 days within a 20-day period. The device must receive human sewage consisting of fecal matter, urine, and toilet paper in a ratio of four urinations to one defecation with at least one defecation per person per day. Devices must be tested at their average rate of capacity as specified in § 159.57. In addition, during three periods of each day the system must process sewage at the peak capacity for the period of time it is rated at peak capacity.

(d) A device that processes and discharges continuously between individual use periods or a large device, as determined by the Coast Guard, must process and discharge sewage over at least 10-consecutive days at the average daily capacity specified by the manufacturer. During three periods of each day the system must process sewage at the peak capacity for the period of time it is rated at peak capacity. The sewage for this test must be fresh, domestic sewage to which primary sludge has been added, as necessary, to create a test sewage with a minimum of 500 milligrams of suspended solids per liter.

**§ 159.123 Coliform test: Type I devices.**

(a) The arithmetic mean of the fecal coliform bacteria in 38 of 40 samples of effluent discharged from a Type I device during the test described in § 159.121 must be less than 1000 per 100 milliliters when tested in accordance with 40 CFR, Part 136.

(b) The 40 samples must be taken from the device as follows: During each of the 10-test days, one sample must be taken at the beginning, middle, and end of an 8-consecutive hour period with one additional sample taken immediately

following the peak capacity processing period.

[CGD 73-83, 40 FR 4624, Jan. 30, 1975; as amended by CGD 75-213, 41 FR 15326, Apr. 12, 1976]

**§ 159.125 Visible floating solids: Type I devices.**

During the sewage processing test (§ 159.121) 40 effluent samples of approximately 1 liter each shall be taken from a Type I device at the same time as samples taken in § 159.123 and passed expeditiously through a U.S. Sieve No. 12 as specified in ASTM E-11-70. The weight of the material retained on the screen after it has been dried to a constant weight in an oven at 103° C. must be divided by the volume of the sample and expressed as milligrams per liter. This value must be 10 percent or less of the total suspended solids as determined in accordance with 40 CFR, Part 136 of at least 38 of the 40 samples.

**NOTE:** 33 U.S.C. 1321(b) (3) prohibits discharge of harmful quantities of oil into or upon the navigable waters of the United States or adjoining shorelines or into or upon the waters of the contiguous zone. Under 40 CFR 110.3 and 110.4 such discharges of oil include discharges which:

(a) Violate applicable water quality standards, or

(b) Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines. If a sample contains a quantity of oil determined to be harmful, the Coast Guard will not certify the device.

[CGD 73-83, 40 FR 4624, Jan. 30, 1975; as amended by CGD 75-213, 41 FR 15326, Apr. 12, 1976]

**§ 159.126 Coliform test: Type II devices.**

(a) The arithmetic mean of the fecal coliform bacteria in 38 of 40 samples of effluent from a Type II device during the test described in § 159.121 must be 200 per 100 milliliters or less when tested in accordance with 40 CFR, Part 136.

(b) The 40 samples must be taken from the device as follows: During each of the 10 test days, one sample must be taken at the beginning, middle and end of an 8-consecutive hour period with one additional sample taken immediately following the peak capacity processing period.

[CGD 75-213, 41 FR 15326, Apr. 12, 1976]

**§ 159.126a Suspended Solids Test: Type II devices.**

During the sewage processing test (§ 159.121) 40 effluent samples must be taken at the same time as samples are taken for § 159.126 and they must be analyzed for total suspended solids in accordance with 40 CFR, Part 136. The arithmetic mean of the total suspended solids in 38 of 40 of these samples must be less than or equal to 150 milligrams per liter.

[CGD 75-213, 41 FR 15326, Apr. 12, 1976]

**§ 159.127 Safety Coliform count: recirculating devices.**

Thirty-eight of forty samples of flush fluid from a recirculating device must have less than 240 fecal coliform bacteria per 100 milliliters. These samples must be collected in accordance with § 159.123(b) and tested in accordance with 40 CFR Part 136.

[CGD 73-83, 40 FR 4624, Jan. 30, 1975; as amended by CGD 75-213, 41 FR 15326, Apr. 12, 1976]

**§ 159.129 Safety: Ignition prevention test.**

(a) Components of a device that are a potential ignition source in an explosive atmosphere must pass the test in paragraph (b) or (c) of this section or meet the requirements of paragraph (d) or have a specific warning in the instruction manual required by § 159.57 that the device should not be installed in an explosive atmosphere.

(b) Components protected by vapor exclusion must be placed in a chamber filled with a rich mixture of gasoline or propane in air with the pressure being varied from 0 to 2 psig once an hour for 8 hours. Vapor readings must be taken in the void being protected and must indicate a leakage less than 20 percent of the lower explosive limit of the mixture in the chamber.

(c) Components providing ignition protection by means other than vapor exclusion must be fitted with an ignition source, such as a spark plug, and a means of injecting an explosive mixture of gasoline or propane and air into the void that protects the component. Connections must be made so as to minimize any additional volume added to the protected void by the apparatus delivering the explosive mixture. The component must be placed in a chamber filled with an explosive mixture and there must be

no ignition of the explosive mixture surrounding the component when the following tests are conducted:

(1) Using any overload protection that is part of the device, the potential ignition source must be operated for one half hour at 110 percent of its rated voltage, one half hour at 50 percent of its rated voltage and one half hour at 100 percent of its rated voltage with the motor or armature locked, if the potential ignition source is a motor or part of a motor's electrical circuit.

(2) With the explosive mixture in the protected void, the test installed ignition source must be activated 50 times.

(3) The tests (1) and (2) must be repeated with any plugs removed.

(d) Components that are certified as being intrinsically safe in accordance with the Instrument Society of American (RP 12.2) or explosion proof in accordance with the Underwriters Laboratories STD 698 in Class I, Group D hazardous locations (46 CFR 111.80-5(a)) need not be subjected to this testing.

#### § 159.131 Safety: Incinerating device.

An incinerating device must not incinerate unless the combustion chamber is closed, must purge the combustion chamber of combustible fuel vapors before and after incineration must secure automatically if the burner does not ignite, must not allow an accumulation of fuel, and must neither produce a temperature on surfaces adjacent to the incineration chamber higher than 67° C nor produce a temperature on surfaces in normal body contact higher than 41° C when operating in an ambient temperature of 25° C. Unitized incineration devices must completely burn to a dry, inert ash, a simultaneous defecation and urination and must not discharge fly ash, malodors, or toxic substances.

#### Subpart D—Recognition of Facilities

#### § 159.201 Application.

(a) To apply for listing as a recognized facility under this part, a facility must apply to the Commandant (G-MMT/82), U.S. Coast Guard Headquarters, Washington, D.C. 20590 and include:

(1) Name and address;

(2) A description of the applicant's capability to perform the tests and evaluations that are required by this part, including information on personnel qualifications, equipment, materials, and facilities; and

(3) A signed statement that the Coast Guard may inspect the facility to verify its qualification and inspect the records on certification of marine sanitation devices.

(b) An applicant under paragraph (a) of this section must submit any other information the Coast Guard requests for the determination of the facility's qualification as a recognized facility.

#### § 159.205 Criteria for recognition.

To qualify for and retain recognition as a recognized facility, a facility must meet the criteria in this section.

(a) The facility must maintain an organization chart that shows the personnel structure and the relationship between administration, operation, and quality control for the testing of marine sanitation devices.

(b) The facility must maintain a quality control program and a quality control manual that describes that program and the responsibilities of personnel for the testing of marine sanitation devices, including:

(1) Receiving, handling, and shipping procedures;

(2) Test procedures;

(3) The calibration system;

(4) The test report system;

(5) Certification procedures and standards;

(6) The record and filing system; and

(7) The standards and filing system for subcontracts.

(c) The facility must maintain a master file that contains the Coast Guard standards, reference standards, and the facility's test standards that apply to the testing of marine sanitation devices.

(d) The facility must maintain the shipping and receiving information for each device, including—

(1) The date of receipt;

(2) The name of the manufacturer;

(3) The type of device;

(4) A record of the visible condition of the device upon receipt; and

(5) Any other information that is necessary to accurately record and positively identify each device that is received.

(e) The facility must follow written procedures for tests of devices. These written procedures must be available for examination upon the request of the Coast Guard.

(f) The facility must maintain data sheets and test equipment lists for all inspections and tests of devices. These must be in sufficient detail for complete verification and evaluation of the operations and objectives, including:

(1) The date and name of the test, the name of the supervising engineer, the manufacturer and description of the test device;

(2) A detailed explanation of the results of each phase of tests and any unusual occurrences; and

(3) The signature of the technician who performs each test.

(g) The facility must maintain a list of the test equipment that it uses and the date of the last calibration of that equipment.

(h) The facility must maintain and document a calibration program and ensure the degree of accuracy as follows:

(1) The accuracy of all measurement instrument standards must be traceable to the primary standards of the National Bureau of Standards. This traceability may be through reference standards that are certified for accuracy and stability by the National Bureau of Standards.

(2) The normal accuracy of the reference standard must be at least four times as great as that of the facility's instrument that is being calibrated. All equipment must be calibrated at least once a year or in accordance with the recommended schedule of the instrument manufacturer of the National Bureau of Standards.

(3) The facility must maintain documentation of the calibration standards and test equipment.

(4) If the facility performs its own calibration, it must maintain written calibration procedures, maintenance information, a record of the values that are recorded during calibration, and the standards and equipment that are used for the calibration.

(5) If the facility does not perform its own calibration, it is responsible for the accuracy of the calibrations.

(i) The facility must have no conflict of interest. The Coast Guard's determination on the conflict of interest questions is final. Except as provided in paragraph (j) of this section, conflict of interest is defined as follows:

(1) The loss or award of a specific contract to test marine sanitation devices is not a substantial factor for the financial well being of the facility;

(2) The facility's personnel are free of the influence or control of manufacturers, suppliers, or vendors; and

(3) The facility is not involved in the promotion of a marine sanitation device.

(j) If the uniqueness or size of a device requires testing by a facility that may not meet all the criteria for conflict of interest in paragraph (i) of this section, a manufacturer may apply to the Commandant (G-MMT/82), U.S. Coast Guard Washington, D.C. 20590 to allow the facility to conduct the tests.

(k) If a recognized facility subcontracts for any testing, it must apply to the Commandant (G-MMT/82), U.S. Coast Guard, Washington, D.C. 20590 for authorization and include the justification for the subcontracting. The recognized facility is responsible for the accuracy and completeness of all tests by a subcontractor.

## SUBCHAPTER S—BOATING SAFETY

## PART 173—VESSEL NUMBERING AND CASUALTY AND ACCIDENT REPORTING

Source: OGD 72-54R, 37 FR 21399, Oct. 7, 1972, unless otherwise noted.

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## Appendix A—Issuing authorities and reporting authorities.

AUTHORITY: Sections 18 and 39, 85 Stat. 213, 220, 228; 46 U.S.C. 1451, 1467, 1488; 49 CFR 1.46(o) (1).

## Subpart A—General

## § 173.1 Purpose.

This part prescribes requirements for numbering vessels and for reporting casualties and accidents to implement sections 17, 18, and 37 of the Federal Boat Safety Act of 1971.

## § 173.3 Definitions.

As used in this part:

(a) "Act" means the Federal Boat Safety Act of 1971 (85 Stat. 213; 46 U.S.C. 1451, et seq.).

(b) "Issuing authority" means a State that has a numbering system approved by the Coast Guard or the Coast Guard where a number system has not been approved. Issuing authorities are listed in Appendix A of this part.

(c) "Operator" means the person who is in control or in charge of a vessel while it is in use.

(d) "Owner" means a person who claims lawful possession of a vessel by virtue of legal title or equitable interest therein which entitles him to such possession.

(e) "Person" means an individual, firm, partnership, corporation, company, association, joint-stock association, or governmental entity and includes a trustee, receiver, assignee, or similar representative of any of them.

(f) "Reporting authority" means a State that has a numbering system approved by the Coast Guard or the Coast Guard where a numbering system has not been approved. Reporting authorities are listed in Appendix A of this part.

(g) "State" means a State of the United States, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the District of Columbia.

(h) "State of principal use" means the State on whose waters a vessel is used or to be used most during a calendar year.

(i) "Use" means operate, navigate, or employ.

### Subpart B—Numbering

#### § 173.11 Applicability.

This subpart applies to each vessel equipped with propulsion machinery of any type used on waters subject to the jurisdiction of the United States and on the high seas beyond the territorial seas for vessels owned in the United States except—

(a) Foreign vessels temporarily using waters subject to U.S. jurisdiction;

(b) Military or public vessels of the United States, except recreational-type public vessels;

(c) A vessel whose owner is a State or subdivision thereof, which is used principally for governmental purposes, and which is clearly identifiable as such;

(d) Ships' lifeboats;

(e) A vessel which has or is required to have a valid marine document as a vessel of the United States.

#### § 173.13 Exemptions.

Where the Coast Guard issues numbers, the following classes of vessels are exempt, under section 19(a) of the Act, from the numbering provisions of the Act and this part:

(a) A vessel that is used exclusively for racing.

(b) A vessel equipped with propulsion machinery of less than 10 horsepower that—

(1) Is owned by the owner of a vessel for which a valid certificate of number has been issued;

(2) Displays the number of that numbered vessel followed by the suffix "1" in the manner prescribed in § 173.27; and

(3) Is used as a tender for direct transportation between that vessel and the shore and for no other purpose.

#### § 173.15 Vessel number required.

(a) Except as provided in § 173.17, no person may use a vessel to which this part applies unless—

(1) It has a number issued on a certificate of number by the issuing author-

ity in the State in which the vessel is principally used; and

(2) The number is displayed as described in § 173.27.

(b) This section does not apply to a vessel for which a valid temporary certificate has been issued to its owner by the issuing authority in the State in which the vessel is principally used.

#### § 173.17 Reciprocity.

(a) Subsection 18(c) of the Act states:

When a vessel is actually numbered in the State of principal use, it shall be considered as in compliance with the numbering system requirements of any State in which it is temporarily used.

(b) Subsection 18(d) of the Act states:

When a vessel is removed to a new State of principal use, the issuing authority of that State shall recognize the validity of a number awarded by any other issuing authority for a period of at least 60 days before requiring numbering in the new State.

#### § 173.19 Other numbers prohibited.

No person may use a vessel to which this part applies that has any number that is not issued by an issuing authority for that vessel on its forward half.

#### § 173.21 Certificate of number required.

(a) Except as provided in §§ 173.13 and 173.17, no person may use a vessel to which this part applies unless it has on board—

(1) A valid certificate of number or temporary certificate for that vessel issued by the issuing authority in the State in which the vessel is principally used; or

(2) For the vessel described in paragraph (b) of this section, a copy of the lease or rental agreement, signed by the owner or his authorized representative and by the person leasing or renting the vessel, that contains at least—

(i) The vessel number that appears on the certificate of number; and

(ii) The period of time for which the vessel is leased or rented.

(b) Section 20(a) of the Act states in part:

The certificate of number for vessels less than 26 feet in length and leased or rented to another for the latter's noncommercial use of less than 24 hours may be retained on shore by the vessel's owner or his representative at the place from which the vessel departs or returns to the possession of the owner or his representative.



**§ 173.23 Inspection of certificate.**

Each person using a vessel to which this part applies shall present the certificate or lease or rental agreement required by § 173.21 to any Federal, State, or local law enforcement officer for inspection at his request.

**§ 173.25 Location of certificate of number.**

No person may use a vessel to which this part applies unless the certificate or lease or rental agreement required by § 173.21 is carried on board in such a manner that it can be handed to a person authorized under § 173.23 to inspect it.

**§ 173.27 Numbers: Display; size; color.**

(a) Each number required by § 173.15 must—

(1) Be painted on or permanently attached to each side of the forward half of the vessel except as allowed by paragraph (b) or required by paragraph (c) of this section;

(2) Be in plain vertical block characters of not less than 3 inches in height;

(3) Contrast with the color of the background and be distinctly visible and legible;

(4) Have spaces or hyphens that are equal to the width of a letter other than "I" or a number other than "1" between the letter and number groupings (Example: DC 5678 EF or DC-5678-EF); and

(5) Read from left to right.

(b) When a vessel is used by a manufacturer or by a dealer for testing or demonstrating, the number may be painted on or attached to removable plates that are temporarily but firmly attached to each side of the forward half of the vessel.

(c) On vessels so configured that a number on the hull or superstructure would not be easily visible, the number must be painted on or attached to a backing plate that is attached to the forward half of the vessel so that the number is visible from each side of the vessel.

(d) Each number displayed on a tender exempted under § 173.13 must meet the requirements of paragraph (a) of this section and have a space or hyphen that is equal to the width of a letter other than "I" or a number other than "1" between the suffix and the

number. (Example: DC 5678 EF 1 or DC-5678-EF-1.)

**§ 173.29 Notification to issuing authority.**

A person whose name appears as the owner of a vessel on a certificate of number shall, within 15 days, notify the issuing authority in a manner prescribed by the issuing authority of—

(a) Any change in his address;

(b) The theft or recovery of the vessel;

(c) The loss or destruction of a valid certificate of number;

(d) The transfer of all or part of his interest in the vessel; and

(e) The destruction or abandonment of the vessel.

**§ 173.31 Surrender of certificate of number.**

A person whose name appears as the owner of a vessel on a certificate of number shall surrender the certificate in a manner prescribed by the issuing authority within 15 days after it becomes invalid under paragraph (b), (c), (d), or (e) of § 173.77.

**§ 173.33 Removal of number.**

The person whose name appears on a certificate of number as the owner of a vessel shall remove the number and validation sticker from the vessel when—

(a) The vessel is documented by the Coast Guard;

(b) The certificate of number is invalid under paragraph (c) of § 173.77; or

(c) The vessel is no longer principally used in the State where the certificate was issued.

**§ 173.35 Coast Guard validation sticker.**

No person may use a vessel except a vessel exempted in § 173.13 that has a number issued by the Coast Guard unless it has the validation sticker issued with the certificate of number displayed within 6 inches of the number.

**Subpart C—Casualty and Accident Reporting****§ 173.51 Applicability.**

(a) This subpart applies to each vessel used on waters subject to the jurisdiction of the United States and on the high seas beyond the territorial seas for vessels owned in the United States that—

(1) Is used by its operator for recreational purposes; or

(2) Is required to be numbered under this part.

(b) This subpart does not apply to a vessel required to have a certificate of inspection under Chapter I of Title 46, Code of Federal Regulations.

**§ 173.53 Immediate notification of death or disappearance.**

(a) When, as a result of an occurrence that involves a vessel or its equipment, a person dies or disappears from a vessel, the operator shall, without delay, by the quickest means available, notify the nearest reporting authority listed in Appendix A of this part of—

(1) The date, time, and exact location of the occurrence;

(2) The name of each person who died or disappeared;

(3) The number and name of the vessel; and

(4) The names and addresses of the owner and operator.

(b) When the operator of a vessel cannot give the notice required by paragraph (a) of this section, each person on board the vessel shall notify the casualty reporting authority or determine that the notice has been given.

**§ 173.55 Report of casualty or accident.**

(a) The operator of a vessel shall submit the casualty or accident report prescribed in § 173.57 to the reporting authority prescribed in § 173.59 when, as a result of an occurrence that involves the vessel or its equipment—

(1) A person dies;

(2) A person loses consciousness or receives medical treatment or is disabled for more than 24 hours;

(3) Damage to the vessel and other property damage totals more than \$100; or

(4) A person disappears from the vessel under circumstances that indicate death or injury.

(b) A report required by this section must be made—

(1) Within 48 hours of the occurrence if a person dies within 24 hours of the occurrence;

(2) Within 48 hours of the occurrence if a person loses consciousness or receives medical treatment or is disabled for more than 24 hours or disappears from a vessel; and

(3) Within 5 days of the occurrence or death if an earlier report is not required by this paragraph.

(c) When the operator of a vessel cannot submit the casualty or accident report required by paragraph (a) of this section, the owner shall submit the casualty or accident report.

**§ 173.57 Casualty or accident report.**

Each report required by § 173.55 must be in writing, dated upon completion, and signed by the person who prepared it and must contain, if available, at least the following information about the casualty or accident:

(a) The numbers and names of each vessel involved.

(b) The name and address of each owner of each vessel involved.

(c) The name of the nearest city or town, the county, the State, and the body of water.

(d) The time and date the casualty or accident occurred.

(e) The location on the water.

(f) The visibility, weather, and water conditions.

(g) The estimated air and water temperatures.

(h) The name, address, age, or date of birth, telephone number, vessel operating experience, and boating safety training of the operator making the report.

(i) The name and address of each operator of each vessel involved.

(j) The number of persons on board or towed on skis by each vessel.

(k) The name, address, and date of birth of each person injured or killed.

(l) The cause of each death.

(m) Weather forecasts available to, and weather reports used by, the operator before and during the use of the vessel.

(n) The name and address of each owner of property involved.

(o) The availability and use of personal flotation devices.

(p) The type and amount of each fire extinguisher used.

(q) The nature and extent of each injury.

(r) A description of all property damage and vessel damage with an estimate of the cost of all repairs.

(s) A description of each equipment failure that caused or contributed to the cause of the casualty.

(t) A description of the vessel casualty or accident.

(u) The type of vessel operation (cruising, drifting, fishing, hunting, ski-

ing, racing, or other), and the type of accident (capsizing, sinking, fire, or explosion or other).

(v) The opinion of the person making the report as to the cause of the casualty.

(w) The make, model, type (open, cabin, house, or other), beam width at widest point, length, depth from transom to keel, horsepower, propulsion (outboard, inboard, inboard outdrive, sail, or other), fuel (gas, diesel, or other), construction (wood, steel, aluminum, plastic, fiberglass, or other), and year built (model year), of the reporting operator's vessel.

(x) The name, address, and telephone number of each witness.

(y) The manufacturer's hull identification number, if any, of the reporting operator's vessel.

(z) The name, address, and telephone number of the person submitting the report.

#### § 173.59 Where to report.

A report required by § 173.55 must be submitted to—

(a) The reporting authority listed in Appendix A of this part where the vessel number was issued, or, if the vessel has no number, where the vessel is principally used; or

(b) The reporting authority where the casualty or accident occurred, if it occurred outside the State where the vessel is numbered or principally used.

#### Subpart D—Issue of Certificate of Number

##### § 173.71 Application for certificate of number.

Any person who is the owner of a vessel to which § 173.11 applies may apply for a certificate of number for that vessel by submitting to the issuing authority, listed in Appendix A of this part, where the vessel will principally be used—

(a) An application on a form and in a manner prescribed by the issuing authority; and

(b) The fee required by the issuing authority.

##### § 173.73 Duplicate certificate of number.

If a certificate of number is lost or destroyed, the person whose name appears on the certificate as the owner may apply for a duplicate certificate by sub-

mitting to the issuing authority that issued the certificate—

(a) An application on a form or in a manner prescribed by the issuing authority; and

(b) The fee required by the issuing authority, if any.

##### § 173.75 Temporary certificate.

A temporary certificate valid for not more than 60 days after it is issued may be issued by an issuing authority pending the issue of a certificate of number. A temporary certificate is not valid after the date that the owner receives the certificate of number from the issuing authority.

##### § 173.77 Validity of certificate of number.

(a) Except as provided in paragraphs (b), (c), (d), and (e) of this section, a certificate of number is valid until the date of expiration prescribed by the issuing authority.

(b) A certificate of number issued by an issuing authority is invalid after the date upon which—

(1) The vessel is documented or required to be documented under Part 67 of Title 46, Code of Federal Regulations;

(2) The person whose name appears on the certificate of number as owner of the vessel transfers all of his ownership in the vessel; or

(3) The vessel is destroyed or abandoned.

(c) A certificate of number issued by an issuing authority is invalid if—

(1) The application for the certificate of number contains a false or fraudulent statement; or

(2) The fees for the issuance of the certificate of number are not paid.

(d) A certificate of number is invalid 60 days after the day on which the vessel is no longer principally used in the State where the certificate was issued.

(e) The certificate of number is invalid when the person whose name appears on the certificate involuntarily loses his interest in the numbered vessel by legal process.

##### § 173.79 Expiration of Coast Guard certificate of number.

A certificate of number issued by the Coast Guard expires 3 years from the date it is issued.

**§ 173.81 Coast Guard forms for numbering and casualty reporting.**

(a) In a State where the Coast Guard is the issuing authority, the following Coast Guard forms must be used:

(1) Each application for a certificate of number or renewal must be made on two-part Form CG-3876 and 3876A, Application for Number and Temporary Certificate.

(2) Each notification required by § 173.29(b) must be made on Form CG-2921, Notification of Change in Status of Vessel.

(3) Each notification required by § 173.29(a) must be made on Form CG-3920, Change of Address Notice.

(4) Each notification required by § 173.29(c) must be made in writing.

(5) Each application for a duplicate certificate of number must be made on two-part Form CG-3919 and CG-3919A, Application for Duplicate Certificate of Number and Temporary Duplicate Certificate.

(6) Each vessel casualty required to be reported by § 173.55 must be made on Form CG-3865.

(b) Each surrender of a certificate of number required by § 173.31 may be made in any form but must contain a written statement as to why the certificate is being surrendered.

**§ 173.83 Availability of Coast Guard forms.**

In a State where the Coast Guard is the issuing authority, forms required by § 173.81 are available at all manned Coast Guard shore units, except light and lantern stations and except for Form CG-3865, at all first- and second-class and some third- and fourth-class post offices.

**§ 173.85 Coast Guard fees.**

(a) In a State where the Coast Guard is the issuing authority the fees for numbering are—

(1) Original number and two validation stickers—\$6;

(2) Renewal of number and two validation stickers—\$6;

(3) Duplicate certificate of number—\$1; and

(4) Replacement of lost or destroyed validation sticker—\$0.25 each.

(b) Fees must be paid by check or money order made payable to the "U.S. Coast Guard," except when the application is made in person by the owner, the fee may be paid in cash.

**APPENDIX A—ISSUING AUTHORITIES AND REPORTING AUTHORITIES**

(a) The State is the issuing authority and reporting authority in:

**STATE**

Alabama—AL	Missouri—MO.
Arizona—AZ.	Montana—MT.
Arkansas—AR.	Nebraska—NB.
California—CA.	Nevada—NV.
Colorado—CL.	New Jersey—NJ.
Connecticut—CT.	New Mexico—NM.
Delaware—DL.	New York—NY.
District of Columbia—DC.	North Carolina—NC.
Florida—FL.	North Dakota—ND.
Georgia—GA.	Ohio—OH.
Guam—GM.	Oklahoma—OK.
Hawaii—HA.	Oregon—OR.
Idaho—ID.	Pennsylvania—PA.
Illinois—IL.	Puerto Rico—PR.
Indiana—IN.	Rhode Island—RI.
Iowa—IA.	South Carolina—SC.
Kansas—KA.	South Dakota—SD.
Kentucky—KY.	Tennessee—TN.
Louisiana—LA.	Texas—TX.
Maine—ME.	Utah—UT.
Maryland—MD.	Vermont—VT.
Massachusetts—MA.	Virginia—VA.
Michigan—MC.	Virgin Islands—VI.
Minnesota—MN.	West Virginia—WV.
Mississippi—MI.	Wisconsin—WS.
	Wyoming—WY.

(b) The Coast Guard is the issuing authority and reporting authority in:

**STATE**

Alaska—AK.	New Hampshire—NH.
American Samoa—AS.	Washington—WN.

(c) The abbreviations following the names of the State listed in paragraphs (a) and (b) are the two capital letters that must be used in the number format to denote the State of principal use as prescribed in § 174.23 of this chapter.

[OGD 72-54R, 37 FR 21899, Oct. 7, 1972 as amended by OGD 76-076, 41 FR 23401, June 10, 1976]

**PART 174—STATE NUMBERING AND CASUALTY REPORTING SYSTEMS**

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## Sec.

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- 174.121 Forwarding of casualty or accident reports.
- 174.123 Annual report of numbered vessels.
- 174.125 Coast Guard address.

**AUTHORITY:** Sections 18 and 39, 85 Stat. 213, 220, 228; 46 U.S.C. 1451, 1467, 1488; 49 CFR 1.46(o)(1).

**SOURCE:** CGD 73-54R, 37 FR 21402, Oct. 7, 1972; unless otherwise noted.

**Subpart A—General**

**§ 174.1 Applicability.**

This part establishes a standard numbering system for vessels and a uniform vessel casualty reporting system for vessels by prescribing requirements applicable to the States for the approval of State numbering systems.

**§ 174.3 Definitions.**

As used in this part:

(a) "Act" means the Federal Boat Safety Act of 1971 (85 Stat. 213; 46 U.S.C. 1451, et seq.).

(b) "Operator" means the person who is in control or in charge of a vessel while it is in use.

(c) "Owner" means a person who claims lawful possession of a vessel by virtue of legal title or equitable interest therein which entitles him to such possession.

(d) "Reporting authority" means a State where a numbering system has been approved by the Coast Guard or the Coast Guard where a numbering system has not been approved. Reporting authorities are listed in Appendix A of Part 173 of this chapter.

**§ 174.5 Requirements for approval.**

The Commandant approves a State numbering system if he finds, after examination of the information submitted by a State, that the State numbering

system and vessel casualty reporting system meet the requirements in this part and the provisions of sections 18 through 24 and section 37 of the Act relating to numbering and casualty reporting.

**§ 174.7 Approval procedure.**

To obtain approval by the Commandant of a numbering system or of any revision to a numbering system, an authorized representative of the State must submit three copies of the State laws, regulations, forms, and policy statements, if any, that pertain to the numbering system or revision to U.S. Coast Guard (GBL/62), 400 Seventh Street SW., Washington, DC 20590.

**Subpart B—Numbering System Requirements**

**§ 174.11 Applicability of State numbering system.**

(a) Except as allowed in paragraph (c) of this section, a State numbering system must require the numbering of vessels to which § 173.11 of this chapter applies.

(b) A State numbering system may require the numbering of any vessel subject to the jurisdiction of the State unless prohibited by the regulations in Part 173 of this chapter.

(c) A State numbering system may exempt from its numbering requirements any vessel or class of vessels to which § 173.13 of this chapter applies.

**§ 174.13 Owner or operator requirements.**

A State numbering system must contain the requirements applicable to an owner or a person operating a vessel that are prescribed in the following sections of Part 173 of this chapter:

(a) Paragraph (a) of § 173.15 *Vessel number required* of this chapter.

(b) Section 173.19 *Other numbers prohibited* of this chapter.

(c) Paragraph (a) of § 173.21 *Certificate of number required* of this chapter.

(d) Section 173.23 *Inspection of certificate* of this chapter.

(e) Section 173.25 *Location of certificate of number* of this chapter.

(f) Section 173.29 *Notification to issuing authority* of this chapter.

(g) Section 173.31 *Surrender of certificate of number* of this chapter.

(h) Section 173.33 *Removal of number* of this chapter.

(i) Section 173.71 *Application for certificate of number* of this chapter.

(j) Section 173.73 *Duplicate certificate of number* of this chapter.

(k) Section 173.77 *Validity of certificate of number* of this chapter.

§ 174.15 Validation stickers.

(a) If a State issues validation stickers, its numbering system must contain the requirements that stickers must be displayed within 6 inches of the number and the stickers must meet the requirements in paragraphs (b) and (c) of this section.

(b) Validation stickers must be approximately 3 inches square.

(c) The year in which each validation sticker expires must be indicated by the colors, blue, international orange, green, and red, in rotation beginning with blue for stickers that expire in 1973.

§ 174.17 Contents of application for certificate of number.

(a) Each form for application for a certificate of number must contain the following information:

- (1) Name of the owner.
- (2) Address of the owner, including ZIP code.
- (3) Date of birth of the owner.
- (4) Citizenship of the owner.
- (5) State in which vessel is or will be principally used.
- (6) The number previously issued by an issuing authority for the vessel, if any.
- (7) Whether the application is for a new number, renewal of a number, or transfer of ownership.
- (8) Whether the vessel is used for pleasure, rent or lease, dealer or manufacturer demonstration, commercial passenger carrying, commercial fishing, or other commercial use.
- (9) Make of vessel.
- (10) Year vessel was manufactured or model year.
- (11) Manufacturer's hull identification number, if any.
- (12) Overall length of vessel.
- (13) Type of vessel (open, cabin, house, or other).
- (14) Whether the hull is wood, steel, aluminum, fiberglass, plastic, or other.
- (15) Whether the propulsion is inboard, outboard, inboard-outdrive, or sail and name of engine manufacturer if available.
- (16) Whether the fuel is gasoline, diesel, or other.
- (17) The signature of the owner.

(b) An application made by a manufacturer or dealer for a number that is to be temporarily affixed to a vessel for demonstration or test purposes may omit items 9 through 16 of paragraph (a) of this section.

(c) An application made by a person who intends to lease or rent the vessel without propulsion machinery may omit items 15 and 16 of paragraph (a) of this section.

§ 174.19 Contents of a certificate of number.

(a) Except as allowed in paragraphs (b), (c), and (d) of this section, each certificate of number must contain the following information:

- (1) Number issued to the vessel.
- (2) Expiration date of the certificate.
- (3) State of principal use.
- (4) Name of the owner.
- (5) Address of owner, including ZIP code.
- (6) Whether the vessel is used for pleasure, rent or lease, dealer or manufacturer demonstration, commercial passenger carrying commercial fishing or other commercial use.
- (7) Manufacturer's hull identification number (if any).
- (8) Make of vessel.
- (9) Year vessel was manufactured.
- (10) Overall length of vessel.
- (11) Whether the vessel is an open boat, cabin cruiser, houseboat, or other type.
- (12) Hull material.
- (13) Whether the propulsion is inboard, outboard, inboard-outdrive, or sail.
- (14) Whether the fuel is gasoline, diesel, or other.
- (15) A quotation of the State regulations pertaining to change of ownership or address; documentation, loss, destruction, abandonment, theft, or recovery of vessel; carriage of the certificate of number on board when the vessel is in use; rendering aid in a boat accident; and reporting of vessel casualties and accidents.

(b) A certificate of number issued to a vessel that has a manufacturer's hull identification number assigned, may omit items 8 through 14 of paragraph (a) of this section if the manufacturer's hull identification number is plainly marked on the certificate.

(c) A certificate of number issued to a manufacturer or dealer to be used on a vessel for test or demonstration pur-

poses may omit items 7 through 14 of paragraph (a) of this section if the word "manufacturer" or "dealer" is plainly marked on the certificate.

(d) A certificate of number issued to a vessel that is to be rented or leased without propulsion machinery may omit items 13 and 14 of paragraph (a) of this section if the words "livery vessel" are plainly marked on the certificate.

#### § 174.21 Contents of temporary certificate.

A temporary certificate issued pending the issuance of a certificate of number must contain the following information:

- (a) Make of vessel.
- (b) Length of vessel.
- (c) Type of propulsion.
- (d) State in which vessel is principally used.
- (e) Name of owner.
- (f) Address of owner, including ZIP code.
- (g) Signature of owner.
- (h) Date of issuance.
- (i) Notice to the owner that the temporary certificate is invalid after 60 days from the date of issuance.

#### § 174.23 Form of number.

(a) Each number must consist of two capital letters denoting the State of the issuing authority, as specified in Appendix A of Part 173 of this chapter, followed by—

(1) Not more than four numerals followed by not more than two capital letters (example: NH 1234 BD); or

(2) Not more than three numerals followed by not more than three capital letters (example: WN 567 EFG).

(b) A number suffix must not include the letters "I", "O", or "Q," which may be mistaken for numerals.

#### § 174.25 Size of certificate of number.

Each certificate of number must be approximately 2½ by 3½ inches.

#### § 174.27 Duration of certificate of number.

A certificate of number must not be valid for more than 3 years.

#### § 174.29 Temporary certificate of number.

A State may issue a temporary certificate of number that is effective for not more than 60 days.

#### § 174.31 Terms and conditions for vessel numbering.

A State numbering system may condition the issuance of a certificate of number on—

(a) Title to, or other proof of ownership of a vessel except a recreational-type public vessel of the United States; or

(b) The payment of State or local taxes, except for a recreational-type public vessel of the United States.

### Subpart C—Casualty Reporting System Requirements

#### § 174.101 Applicability of State casualty reporting system.

(a) A State casualty reporting system must require the reporting of vessel casualties and accidents involving vessels to which § 173.51 of this chapter applies.

(b) The State casualty reporting system may require vessel casualty or accident reports resulting in property damage of less than \$100.

#### § 174.103 Administration.

The State casualty reporting system must be administered by a State agency that—

(a) Will provide for the reporting of all casualties and accidents prescribed in § 173.55 of this chapter;

(b) Receives reports of vessel casualties or accidents required in § 174.101;

(c) Reviews accident and casualty reports to assure accuracy and completeness of reporting;

(d) Determines the cause of casualties and accidents reported;

(e) Notifies the Coast Guard, in writing, when a problem area in boating safety peculiar to the State is determined, together, with corrective measures instituted or recommended; and

(f) Reports on vessel numbering and vessel casualties and accidents as required in Subpart D of this part.

#### § 174.105 Owner or operator casualty reporting requirements.

A State vessel casualty reporting system must contain the following requirements of Part 173 of this chapter applicable to an owner or a person operating a vessel:

(a) Section 173.55 *Report of casualty or accident of this chapter.*

(b) Section 173.59 *Where to report of this chapter.*

(c) Section 173.53 *Immediate notification of death or disappearance of this chapter.*

(d) Section 173.57 *Casualty or accident report of this chapter.*

[CGD 72-54R, 37 FR 21399, Oct. 7, 1972, as amended by CGD 72-54CR, 37 FR 24423, Nov. 17, 1972]

**§ 174.107 Contents of casualty or accident report form.**

Each form for reporting a vessel casualty or accident must contain the information required in § 173.57 of this chapter.

**Subpart D—State Reports**

**§ 174.121 Forwarding of casualty or accident reports.**

Within 30 days of the receipt of a casualty or accident report, each State that has an approved numbering system must forward a copy of that report to the Commander of the Coast Guard District in which the State Capitol is located, except that Ohio and Minnesota must forward reports to the Commander, Ninth Coast Guard District, and Vermont to the Commander, Third Coast Guard District.

**§ 174.123 Annual report of numbered vessels.**

Before March 1 of each year, each State that has an approved numbering system must prepare and submit Coast Guard Form CGHQ-3923, Report of Certificates of Number Issued to Boats, to the Coast Guard.

**§ 174.125 Coast Guard Address.**

The report required by § 174.123 must be sent to the Commandant (G-BLC), U.S. Coast Guard, Washington, D.C. 20590.

[CGD 76-076, 41 FR 23401, June 10, 1976]

**PART 175—EQUIPMENT REQUIREMENTS**

**Subpart A—General**

**Sec.**

**175.1 Applicability.**

**175.3 Definitions.**

**Subpart B—Personal Flotation Devices**

**175.11 Applicability.**

**175.13 Definitions.**

**175.15 Personal flotation devices required.**

**175.17 Exceptions.**

**175.19 Stowage.**

**175.21 Condition; approval; marking.**

**175.23 Personal flotation device equivalents.**

**AUTHORITY:** Secs. 5 and 39 of the Federal Boat Safety Act of 1971, 46 U.S.C. 1454, 1488; 49 CFR 1.46(o) (1).

**SOURCE:** CGD 72-120R, 38 FR 8115, Mar. 28, 1973, unless otherwise noted.

**CROSS REFERENCE:** The regulations in this Part 175 superseded the regulations in Part 199 on October 1, 1973.

**Subpart A—General**

**§ 175.1 Applicability.**

This part prescribes rules governing the use of boats on waters subject to the jurisdiction of the United States and on the high seas beyond the territorial seas for boats owned in the United States except—

(a) Foreign boats temporarily using waters subject to U.S. jurisdiction;

(b) Military or public boats of the United States, except recreational-type public vessels;

(c) A boat whose owner is a State or subdivision thereof, which is used principally for governmental purposes, and which is clearly identifiable as such;

(d) Ship's lifeboats.

**§ 175.3 Definitions.**

As used in this part:

(a) "Boat" means any vessel manufactured or used primarily for noncommercial use; leased, rented, or chartered to another for the latter's noncommercial use; or engaged in the carrying of six or fewer passengers.

(b) "Recreational boat" means any vessel manufactured or used primarily for noncommercial use; or leased, rented, or chartered to another for the latter's noncommercial use. It does not include a vessel engaged in the carrying of six or fewer passengers.

(c) "Vessel" includes every description of watercraft, other than a seaplane on the water, used or capable of being used as a means of transportation on the water.

(d) "Use" means operate, navigate, or employ.

(e) "Passenger" means every person carried on board a vessel other than—

(1) The owner or his representative;

(2) The operator;

(3) Bona fide members of the crew engaged in the business of the vessel who have contributed no consideration for their carriage and who are paid for their services; or

(4) Any guest on board a vessel which is being used exclusively for pleasure purposes who has not contributed any consideration, directly or indirectly, for his carriage.



(f) "Racing shell, rowing scull, and racing kayak" means a manually propelled boat that is recognized by national or international racing associations for use in competitive racing and one in which all occupants row, scull, or paddle, with the exception of a coxswain, if one is provided, and is not designed to carry and does not carry any equipment not solely for competitive racing.

#### Subpart B—Personal Flotation Devices

##### § 175.11 Applicability.

This subpart applies to all recreational boats that are propelled or controlled by machinery, sails, oars, paddles, poles, or another vessel except racing shells, rowing sculls, and racing kayaks.

##### § 175.13 Definitions.

As used in this subpart:

(a) "Personal flotation device" means a device that is approved by the Commandant under 46 CFR Part 160.

(b) "PFD" means "personal flotation device".

##### § 175.15 Personal flotation devices required.

(a) Except as provided in § 175.17, no person may use a recreational boat less than 16 feet in length or a canoe or kayak unless at least one PFD of the following types or their equivalents listed in Table 175.23 is on board for each person:

- (1) Type I PFD.
- (2) Type II PFD.
- (3) Type III PFD.
- (4) Type IV PFD.

(b) No person may use a recreational boat 16 feet or more in length, except a canoe or kayak, unless at least one PFD of the following types or their equivalents listed in Table 175.23 is on board for each person:

- (1) Type I PFD.
- (2) Type II PFD.
- (3) Type III PFD.

(c) No person may use a recreational boat 16 feet or more in length, except a canoe or kayak, unless at least one type IV PFD or its equivalent listed in Table 175.23 is on board in addition to the PFD's required in paragraph (b) of this section.

##### § 175.17 Exceptions.

(a) Before October 1, 1977, a person using a kayak or canoe that is enclosed by a deck and spray skirt need not comply with § 175.15(a) if he wears a vest-type lifesaving device that—

(1) Has no less than 150 separate permanently inflated air sacs made of not less than 12 mil polyvinylchloride film and has not less than 13 pounds of positive buoyancy in fresh water; if worn by a person who weighs more than 90 pounds; or

(2) Has no less than 10 separate permanently inflated air sacs made of not less than 12 mil polyvinylchloride film and has not less than 8½ pounds of positive buoyancy in fresh water, if worn by a person who weighs 90 pounds or less.

(b) A type V PFD may be carried in lieu of any PFD required in § 175.15 if that type V PFD is approved for the activity in which the recreational boat is being used.

(49 CFR 1.46(n)(1))

[CGD 72-54R, 37 FR 21402, Oct. 7, 1972 as amended by CGD 74-159, 41 FR 23954, June 14, 1976]

EFFECTIVE DATE NOTE: Section 175.17(a) will become effective Oct. 1, 1977. For the convenience of the user, the superseded text is set forth below:

##### § 175.17 Exceptions.

(a) A person using a canoe or kayak that is enclosed by a deck and spray skirt need not comply with § 175.15(a) if he wears a vest-type lifesaving device that—

(1) Has no less than 150 separate permanently inflated air sacs made of not less than 12 mil polyvinylchloride film and has not less than 13 pounds of positive buoyancy in fresh water, if worn by a person who weighs more than 90 pounds; or

(2) Has no less than 120 separate permanently inflated air sacs made of not less than 12 mil polyvinylchloride film and has not less than 8½ pounds of positive buoyancy in fresh water, if worn by a person who weighs 90 pounds or less.

##### § 175.19 Stowage.

(a) No person may use a recreational boat unless each type I, type II, type III, or type V PFD required by §§ 175.15 or 175.17 is readily accessible.

(b) No person may use a recreational boat unless each type IV PFD required by § 175.15 is immediately available.

##### § 175.21 Conditions: approval; marking.

No person may use a recreational boat unless each device required by § 175.15, or each device allowed by § 175.17, is—

- (a) In serviceable condition;
- (b) Legibly marked with the approval number as specified in 46 CFR Part 160 for items subject to approval; and
- (c) Of an appropriate size for the person for whom it is intended.

**§ 175.23 Personal flotation device equivalents.**

Table 175.23 lists devices that are equivalent to personal flotation devices.

TABLE 175.23

<i>Devices marked—</i>	<i>Are equivalent to performance type</i>
160.002 Life preserver.	Type I personal flotation device.
160.003 Life preserver.	Do.
160.004 Life preserver.	Do.
160.005 Life preserver.	Do.
160.009 Ring life buoy	Type IV personal flotation device.
160.047 Buoyant vest.	Type II personal flotation device.
160.048 Buoyant cushion.	Type IV personal flotation device.
160.049 Buoyant cushion.	Do.
160.050 Ring life buoy	Do.
160.052 Buoyant vest.	Type II personal flotation device.
160.053 Work vest.	Type V personal flotation device.
160.055 Life preserver.	Type I personal flotation device.
160.060 Buoyant vest.	Type II personal flotation device.
160.064 Special purpose water safety buoyant devices.	A device intended to be worn may be equivalent to type II or type III. A device that is equivalent to type III is marked "Type III Device—may not turn unconscious wearer". A device intended to be grasped is equivalent to type IV.

**PART 177—CORRECTION OF ESPECIALLY HAZARDOUS CONDITIONS**

Sec.

177.01 Purpose and applicability.

177.03 Definitions.

177.05 Action to correct an especially hazardous condition.

177.07 Other unsafe conditions.

177.08 Regulated boating areas.

177.09 Penalties.

**AUTHORITY:** Sec. 39, 85 Stat. 228, 46 U.S.C. 1488; 49 CFR 1.46(o)(1).

**SOURCE:** CGD 72-71R, 37 FR 13347, July 7, 1972, unless otherwise noted.

**§ 177.01 Purpose and applicability.**

This part prescribes rules to implement section 13 of the Federal Boat Safety Act of 1971 which governs the correction of especially hazardous conditions on boats using waters subject to the jurisdiction of the United States and

on the high seas beyond the territorial seas for boats owned in the United States, except operators of—

(a) Foreign boats temporarily using waters subject to United States jurisdiction;

(b) Military or public boats of the United States, except recreational-type public boats;

(c) A boat whose owner is a State or subdivision thereof, which is used principally for governmental purposes and which is clearly identifiable as such;

(d) Ship's lifeboats.

**§ 177.03 Definitions.**

As used in this part:

(a) "Act" means the Federal Boat Safety Act of 1971 (85 Stat. 213; 46 U.S.C. 1451, et seq.).

(b) "Boat" means any vessel—

(1) Manufactured or used primarily for noncommercial use; or

(2) Leased, rented, or chartered to another for the latter's noncommercial use; or

(3) Engaged in the carrying of six or fewer passengers.

(c) "Coast Guard Boarding Officer" means a commissioned, warrant, or petty officer of the Coast Guard having authority to board any vessel under the Act of August 4, 1949, 63 Stat. 502, as amended (14 U.S.C. 89).

(d) "Operator" means the person who is in control or in charge of a boat while it is in use.

(e) "Use" means operate, navigate, or employ.

(f) "Vessel" includes every description of watercraft, other than a seaplane on the water, used or capable of being used as a means of transportation on the water.

**§ 177.05 Action to correct an especially hazardous condition.**

An operator of a boat who is directed by a Coast Guard Boarding Officer to take immediate and reasonable steps necessary for the safety of those aboard the vessel, under section 13 of the Act, shall follow the direction of the Boarding Officer, which may include direction to—

(a) Correct the especially hazardous condition immediately;

(b) Proceed to a mooring, dock, or anchorage; or

(c) Suspend further use of the boat until the especially hazardous condition is corrected.

## § 177.07 Other unsafe conditions.

For the purpose of section 13 of the Act, "other unsafe condition" means a boat—

(a) Does not display the navigation lights prescribed by 46 CFR Subpart 25.05 between sunset and sunrise;

(b) Has fuel leakage from either the fuel system or engine;

(c) Has an accumulation of fuel in the bilges or a compartment other than a fuel tank;

(d) Does not meet the ventilation requirements for tanks and engine spaces prescribed by 46 CFR Subpart 25.40; or

(e) Does not meet the requirements for backfire flame control prescribed by 46 CFR Subpart 25.35.

(f) Is operated in a Regulated Boating Area as described in 177.08 when—

(1) The wave height within the Regulated Boating Area is 4 feet or greater; or

(2) The wave height within the Regulated Boating Area is equal to or greater than the wave height determined by the formula

$$\frac{L}{10} + F = W \text{ where:}$$

**L**—Overall length of a boat measured in feet in a straight horizontal line along and parallel with the centerline between the intersections of this line with the vertical planes of the stem and stern profiles excluding deckhouses and equipment.

**F**—The minimum freeboard when measured in feet from the lowest point along the upper strake edge to the surface of the water.

**W**—Maximum wave height in feet to the nearest highest whole number; or

(3) The surface current is 4 knots or greater within the Regulated Boating Area.

(g) Designated manifestly unsafe for a specific voyage on a specific body of water due to:

(1) Unsuitable design or configuration, or

(2) Improper construction or inadequate material condition, or

(3) Improper or inadequate operational or safety equipment, and set forth in a regulation issued by a District Commander under the authority of 33 CFR 1.05-1(d).

[CGD 72-71R, 37 FR 13347, July 7, 1972, as amended by CGD 73-41R, 39 FR 2583, Jan. 23, 1974; CGD 73-41R, 39 FR 5488, Feb. 13, 1974; CGD 73-40R, 39 FR 10131, Mar. 18, 1974]

## § 177.08 Regulated boating areas.

For the purpose of this part the following are regulated boating areas.

(a) *Quillayute River Entrance, Wash.* From the west end of James Island 47° 54'23" N., 124°39'05" W. southward to buoy No. 2 at 47°53'42" N., 124°38'42" W. eastward to the shoreline at 47°53'42" N., 124°37'51" W., thence northward along the shoreline to 47°54'29" N., 124°38'20" W. thence northward to 47°54'36" N., 124°38'22" W. thence westward to the beginning.

(b) *Grays Harbor Entrance, Wash.* From a point on the shoreline at 46° 59'00" N., 124°10'10" W. westward to 46°59'00" N., 124°5'30" W. thence southward to 46°51'00" N., 124°15'30" W. thence eastward to a point on the shoreline at 46°51'00" N., 124°06'40" W. thence northward along the shoreline to a point at the south jetty 46°54'20" N., 124°08'07" W. thence eastward to 46° 54'10" N., 124°05'00" W. thence northward to 46°55'00" N., 124°03'30" W. thence northwestward to Damon Point at 46°56'50" N., 124°06'30" W. thence westward along the north shoreline of the harbor to the north jetty at 46°55'40" N., 124°10'27" W. thence northward along the shoreline to the beginning.

(c) *Willapa Bay, Wash.* From a point on the shoreline at 46°46'00" N., 124° 05'40" W. westward to 46°44'00" N., 124° 10'45" W. thence southward to 46°35'00" N., 124°10'45" W. thence eastward to a point on the shoreline at 46°35'00" N., 124°03'45" W. thence northward along the shoreline around the north end of Leadbetter Point thence southward along the east shoreline of Leadbetter Point to 46°36'00" N., 124°02'15" W. thence eastward to 46°36'00" N., 124°00'00" W. thence northward to Toke Point at 46° 42'15" N., 123°58'00" W. thence westward along the north shoreline of the harbor and northward along the seaward shoreline to the beginning.

(d) *Columbia River Bar, Wash.-Oreg.* From a point on the shoreline at 46°18'00" N., 124°04'39" W. thence westward to 46°18'00" N., 124°09'30" W. thence southward to 46°12'00" N., 124°09'30" W. thence eastward to a point on the shoreline at 46°12'00" N., 123°59'33" W. thence eastward to Tansy Point Range Front Light at 46°11'16" N., 123°55'05" W.; thence northward to Chinook Point at 46°15'08" N., 123°55'25" W. thence northwestward to the north end of Sand Island at 46°17'29" N., 124°01'25" W.

thence southwestward to a point on the north shoreline of the harbor at 46°-16'25" N., 124°02'28" W. thence north-westward and southwestward along the north shoreline of the harbor and northward along the seaward shoreline to the beginning.

(e) *Nehalem River Bar, Oreg.* From a point on the shoreline at 45°41'25" N., 123°-56'16" W. thence westward 45°41'25" N., 123°59'00" W. thence southward to 45°37'25" N., 123°59'00" W. thence eastward to a point on the shoreline at 45°-37'25" N., 123°56'38" W. thence northward along the shoreline to the north end of the south jetty at 45°39'40" N., 123°-55'45" W. thence westward to a point on the shoreline at 45°39'45" N., 123°56'-19" W. thence northward along the shoreline to the beginning.

(f) *Tillamook Bay Bar, Oreg.* From a point on the shoreline at 45°35'15" N., 123°57'05" W. thence westward 45°35'15" N., 124°00'00" W. thence southward to 45°30'00" N., 124°00'00" W. thence eastward to a point on the shoreline at 45°30'00" N., 123°57'40" W. thence northward along the shoreline to the north end of Kincheloe Point at 45°33'30" N., 123°56'05" W. thence northward to a point on the north shoreline of the harbor at 45°33'40" N., 123°55'59" W. thence westward along the north shoreline of the harbor then northward along the seaward shoreline to the beginning.

(g) *Netarts Bay Bar, Oreg.* From a point on the shoreline at 45°28'05" N. thence westward to 45°28'05" N., 124°00'00" W. thence southward to 45°24'00" N., 124°00'00" W. thence eastward to a point on the shoreline at 45°24'00" N., 123°57'45" W. thence northward along the shoreline to 45°26'03" N., 123°57'15" W. thence eastward to a point on the north shoreline of the harbor at 45°26'00" N., 123°56'57" W. thence northward along the shoreline to the beginning.

(h) *Siletz Bay Bar, Oreg.* From a point on the shoreline at 44°56'32" N., 124°-01'29" W. thence westward to 44°56'32" N., 124°03'00" W. thence southward to 44°54'40" N., 124°03'15" W. thence eastward to a point on the shoreline at 44°54'40" N., 124°01'55" W. thence northward along the shoreline to 44°55'-35" N., 124°01'25" W. thence northward to a point on the north shoreline of the harbor at 44°55'45" N., 124°01'20" W. thence westward and northward along the shoreline to the beginning.

(i) *Depoe Bay Bar, Oreg.* From a point on the shoreline at 44°49'15" N., 124°

04'00" W. thence westward to 44°49'15" N., 124°04'35" W. thence southward to 44°47'55" N., 124°04'55" W. thence eastward to a point on the shoreline at 44°-47'53" N., 124°04'25" W. thence northward along the shoreline and eastward along the south bank of the entrance channel to the highway bridge thence northward to the north bank at the bridge thence westward along the north bank of the entrance channel and northward along the seaward shoreline to the beginning.

(j) *Yaquina Bay Bar, Oreg.* From a point on the shoreline at 44°38'11" N., 124°03'47" W. thence westward to 44°-38'11" N., 124°05'55" W. thence southward to 44°35'15" N., 124°06'05" W. thence eastward to a point on the shoreline at 44°35'15" N., 124°04'02" W. thence northward along the shoreline and eastward along the south bank of the entrance channel to the highway bridge thence northward to the north bank of the entrance channel at the bridge thence westward along the north bank of the entrance channel and northward along the seaward shoreline to the beginning.

(k) *Siuslaw River Bar, Oreg.* From a point on the shoreline at 44°02'00" N., 124°08'00" W. thence westward to 44°-02'00" N., 124°09'30" W. thence southward to 44°00'00" N., 124°09'30" W. thence eastward to a point on the shoreline at 44°00'00" N., 124°08'12" W. thence northward along the shoreline and southward along the west bank of the entrance channel to 44°00'25" N., 124°07'48" W. thence southeastward to a point on the east bank of the entrance channel at 44°00'20" N., 124°07'31" W. thence northward along the east bank of the entrance channel and northward along the seaward shoreline to the beginning.

(l) *Umpqua River Bar, Oreg.* From a point on the shoreline at 43°41'20" N., 124°11'58" W. thence westward to 43°-41'20" N., 124°13'32" W. thence southward to 43°38'35" N., 124°14'25" W. thence eastward to a point on the shoreline at 43°38'35" N., 124°12'35" W. thence northward along the shoreline to the north end of the training jetty at 43°40'15" N., 124°11'45" W. thence northward to a point on the west bank of the entrance channel at 43°40'40" N., 124°11'41" W. thence southwestward along the west bank of the entrance channel thence northward along the seaward shoreline to the beginning.

(m) *Coos Bay Bar, Oreg.* From a point on the shoreline at 43°22'15" N., 124°19'34" W. thence westward to 43°22'20" N., 124°22'28" W. thence southwestward to 43°21'00" N., 124°23'35" W. thence southeastward to a point on the shoreline at 43°20'25" N., 124°22'28" W. thence northward along the shoreline and eastward along the south shore of the entrance channel to a point on the shoreline at 43°20'52" N., 124°19'12" W. thence eastward to a point on the east shoreline of the harbor at 43°21'00" N., 124°18'50" W. thence northward to a point on the west shoreline of the harbor at 43°21'45" N., 124°19'10" W. thence south and west along the west shoreline of the harbor thence northward along the seaward shoreline to the beginning.

(n) *Coquille River Bar, Oreg.*—From a point on the shoreline at 43°08'25" N., 124°25'04" W. thence southwestward to 43°07'50" N., 124°27'05" W. thence southwestward to 43°07'03" N., 124°28'25" W. thence eastward to a point on the shoreline at 43°06'00" N., 124°25'55" W. thence northward along the shoreline and eastward along the south shoreline of the channel entrance to 43°07'17" N., 124°25'00" W. thence northward to the east end of the north jetty at 43°07'24" N., 124°24'59" W. thence westward along the north shoreline of the entrance channel and northward along the seaward shoreline to the beginning.

(o) *Rogue River Bar, Oreg.*—From a point on the shoreline at 42°26'25" N., 124°26'03" W. thence westward to 42°26'10" N., 124°27'05" W. thence southward to 42°24'15" N., 124°27'05" W. thence eastward to a point on the shoreline at 42°24'15" N., 124°25'30" W. thence northward along the shoreline and eastward along the south shoreline of the entrance channel to the highway bridge thence northward across the inner harbor jetty to a point on the north shoreline of the entrance channel at the highway bridge thence westward along the north shoreline of the entrance channel thence northward along the seaward shoreline to the beginning.

(p) *Chetco River Bar, Oreg.*—From a point on the shoreline at 42°02'35" N., 124°17'20" W. thence southeastward to 42°01'45" N., 124°16'30" W. thence northwestward to a point on the shoreline at 42°02'10" N., 124°15'35" W. thence northwestward along the shoreline thence northward along the east shoreline of the channel entrance to 42°-

02'47" N., 124°16'03" W. thence northward along the west face of the inner jetty and east shoreline of the channel entrance to the highway bridge thence westward to the west shoreline of the channel at the highway bridge thence southward along the west shoreline of the channel thence westward along the seaward shoreline to the beginning.

[CGD 73-41R, 39 FR 2583, Jan. 23, 1974]

#### § 177.09 Penalties.

An operator of a boat who does not follow the directions of a Coast Guard Boarding Officer prescribed in § 177.05 is, in addition to any other penalty prescribed by law, subject to—

(a) The criminal penalties of section 34 of the Federal Boat Safety Act of 1971 which provides that "Any person who willfully violates section 12(c) of this Act or the regulations issued thereunder shall be fined not more than \$1,000 for each violation or imprisoned not more than 1 year, or both," and

(b) The civil penalties of subsection 35(b) of the Federal Boat Safety Act of 1971 which provides "In addition to any other penalty prescribed by law any person who violates any other provision of this Act or the regulations issued thereunder shall be liable to a civil penalty of not more than \$500 for each violation. If the violation involves the use of a vessel, the vessel, except as exempted by subsection 4(c) of this Act, shall be liable and may be proceeded against in the district court of any district in which the vessel may be found."

#### PART 179—DEFECT NOTIFICATION

##### Sec.

- 179.01 Purpose.
- 179.03 Definitions.
- 179.05 Manufacturer discovered defects.
- 179.07 Notice given by "more expeditious means."
- 179.09 Contents of notification.
- 179.11 Defects determined by the Commandant.
- 179.13 Initial report to the Commandant.
- 179.15 Followup report.
- 179.17 Penalties.
- 179.19 Address of Commandant.

**AUTHORITY:** 46 U.S.C. 1464 (f) and (g); 49 CFR 1.46(o) (1).

**SOURCE:** OGD 72-55R, 37 FR 15776, Aug. 4, 1972, unless otherwise noted.

#### § 179.01 Purpose.

This part prescribes rules to implement section 15 of the Federal Boat

Safety Act of 1971 governing the notification of defects in boats and associated equipment.

**§ 179.03 Definitions.**

(a) "Act" means the Federal Boat Safety Act of 1971.

(b) "Manufacturer" means any person engaged in—

(1) The manufacture, construction, or assembly of boats or associated equipment; or

(2) The manufacture or construction of components for boats and associated equipment to be sold for subsequent assembly; or

(3) The importation into the United States for sale of boats, associated equipment, or components thereof.

(c) "Boat" means any vessel—

(1) Manufactured or used primarily for noncommercial use; or

(2) Leased, rented, or chartered to another for the latter's noncommercial use; or

(3) Engaged in the carrying of six or fewer passengers.

(d) "Associated equipment" means an—

(1) Inboard engine,

(2) Outboard engine, or

(3) Stern drive unit

as shipped, transferred, or sold from the place of manufacture and includes all attached parts and accessories.

**§ 179.05 Manufacturer discovered defects.**

Each manufacturer who is required to furnish a notice of a defect or failure to comply with a standard prescribed pursuant to section 5 of the Act by section 15(a) of the Act shall furnish that notice within 30 days after he discovers or acquires information of the defect or failure to comply.

**§ 179.07 Notice given by "more expeditious means."**

Each manufacturer who gives the notice required by section 15 of the Act by more expeditious means than certified mail must give such notice in writing.

**§ 179.09 Contents of notification.**

Each notice required by section 15(a) of the Act must include the following additional information:

(a) The name and address of the manufacturer.

(b) Identifying classifications including the make, model year, if appropriate, the inclusive dates (month and year) of the manufacture, or serial numbers and any other data necessary to describe the boats or associated equipment that may be affected.

**§ 179.11 Defects determined by the Commandant.**

A manufacturer who is informed by the Commandant under section 15(e) of the Act that a boat or associated equipment contains a defect relating to safety or failure to comply with a standard prescribed pursuant to section 5 of the Act shall, within 30 days of receipt of the information—

(a) Furnish the notification described in section 15(c) of the Act to the persons designated in section 15(b) of the Act, or

(b) Present his views to the Commandant by certified mail to establish that there is no defect relating to safety or failure of compliance.

**§ 179.13 Initial report to the Commandant.**

(a) When a manufacturer gives a notification required by section 15 of the Act, he shall concurrently send to the Commandant by certified mail—

(1) A true or representative copy of each notice, bulletin, and other communication that he has given to the persons required to be notified under section 15(b) of the Act;

(2) The total number of boats or associated equipment potentially affected by the defect or failure to comply with a standard prescribed pursuant to section 5 of the Act; and

(3) If discovered or determined by the manufacturer, a chronology of all principal events upon which the determination is based.

(b) A manufacturer may submit an item required by paragraph (a) of this section that is not available at the time of submission to the Commandant when it becomes available if the manufacturer explains why it was not submitted within the time required and estimates when it will become available.

**§ 179.15 Followup report.**

(a) Each manufacturer who makes an initial report required by § 179.13 shall submit a followup report to the Commandant by certified mail within 60 days after the initial report. The followup

report must contain at least the following information:

- (1) A positive identification of the initial report;
  - (2) The number of units in which the defect was discovered as of the date of the followup report;
  - (3) The number of units in which corrective action has been completed as of the date of the followup report;
  - (4) The number of first purchasers not notified because of an out-of-date name or address, or both; and
  - (5) An updating of the information required by § 179.13.
- (b) Each manufacturer shall submit any additional followup reports requested by the Commandant.

#### § 179.17 Penalties.

(a) Each manufacturer who fails to furnish a notification as required by section 15(a) of the Act or fails to exercise reasonable diligence in fulfilling the undertaking given pursuant to section 15(c) of the Act is subject to the penalties prescribed by section 35(a) of the Act.

(b) Each manufacturer who fails to comply with any other provision of section 15 of the Act or the regulations in this part is subject to the penalties prescribed by section 35(b) of the Act.

#### § 179.19 Address of Commandant.

Each report and communication sent to the Coast Guard required by this part must be submitted to:

U.S. Coast Guard (BBC/62), 400 Seventh Street SW., Washington, DC 20590.

## PART 181—MANUFACTURER REQUIREMENTS

### Subpart A—General

Sec.

- 181.1 Purpose and applicability.  
181.3 Definitions.

### Subpart B—Manufacturer Certification of Compliance

- 181.5 Purpose and applicability.  
181.7 Compliance certification label required.  
181.9 Affixing labels.  
181.11 Exceptions to labeling requirement.  
181.13 Removal of labels.  
181.15 Contents of label.  
181.17 Label numbers and letters.  
181.19 Construction of labels.

### Subpart C—Identification of Hulls

- 181.21 Purpose and applicability.  
181.23 Hull identification numbers required.

Sec.

- 181.25 Hull identification number format.  
181.27 Additional characters in hull identification number.  
181.29 Hull identification number display.  
181.31 Manufacturer identification assigned.

AUTHORITY: Secs. 5, 7, and 39, 85 Stat. 213, 215, 216, 228; 46 U.S.C. 1454, 1456, 1488; 49 CFR 1.46(o) (1).

SOURCE: OGD 72-60, 37 FR 15779, Aug. 4, 1972, unless otherwise noted.

## Subpart A—General

### § 181.1 Purpose and applicability.

This part prescribes requirements for the certification of boats and associated equipment and identification of boats to which section 4 of the Federal Boat Safety Act of 1971 applies.

### § 181.3 Definitions.

As used in this part—

(a) "Manufacturer" means any person engaged in—

(1) The manufacture, construction, or assembly of boats or associated equipment; or

(2) The importation into the United States for sale of boats, associated equipment, or components thereof.

(b) "Boat" means any vessel manufactured or used primarily for noncommercial use; leased, or rented, or chartered to another for the latter's noncommercial use; or engaged in the carrying of six or fewer passengers.

(c) "Associated equipment" means—

(1) Any system, part, or component of a boat as originally manufactured or any similar part or component manufactured or sold for replacement, repair, or improvement of such system, part, or component;

(2) Any accessory or equipment for, or appurtenance to, a boat; and

(3) Any marine safety article, accessory, or equipment intended for use by a person on board a boat; but

(4) Excluding radio equipment.

(d) "Date of certification" means the date on which a boat or item of associated equipment is certified to comply with all applicable U.S. Coast Guard safety standards in effect on that date.

(e) "Date of manufacture" means the month and year during which construction or assembly of a boat or item of associated equipment begins.

(f) "Model year" means the period beginning August 1 of any year and ending on July 31 of the following year.

Each model year is designated by the year in which it ends.

(g) "Private label merchandiser" means any person engaged in the business of selling or distributing, under his own trade name, boats or items of associated equipment manufactured by another.

### Subpart B—Manufacturer Certification of Compliance

#### § 181.5 Purpose and applicability.

This subpart prescribes requirements for the certification of boats and associated equipment to which section 4 of the Federal Boat Safety Act of 1971 applies and to which a safety standard prescribed in Part 183 of this chapter applies.

#### § 181.7 Compliance certification label required.

Unless there is affixed to it a certification label that contains the information required by § 181.15—

(a) No person who manufactures, constructs, or assembles a boat or associated equipment may deliver that boat or equipment for the purpose of sale;

(b) No person may import into the United States any boat or associated equipment; and

(c) No person engaged in the business of selling or distributing boats or associated equipment may sell or offer for sale any boat or associated equipment.

#### § 181.9 Affixing labels.

(a) Each manufacturer of a boat or item of associated equipment to which a standard or regulation prescribed in Part 183 of this chapter applies shall affix a certification label that contains the information required by § 181.15 to that boat or equipment before it—

(1) Leaves the place of manufacture for the purpose of sale; or

(2) Is imported.

(b) The manufacturer of a boat or item of associated equipment that is sold to a private label merchandiser may, at the option of the private label merchandiser, affix a certification label identifying the private label merchandiser as the manufacturer before the boat or item of associated equipment leaves the place of manufacture.

#### § 181.11 Exceptions to labeling requirement.

(a) This part does not apply to boats or associated equipment intended solely

for export, and so labeled, tagged, or marked on the boat or equipment and on the outside of the container, if any, which is exported.

(b) If an item of associated equipment is so small that a certification label that meets the requirements in § 181.15 cannot be affixed to it, a certification label that contains the information required by § 181.15 may be printed on the smallest container in which the item is packed or on a slip packed with the item.

#### § 181.13 Removal of labels.

No person may remove a label required by this part or remove or alter any information on a label required by this part, unless authorized by the Commandant.

#### § 181.15 Contents of labels.

(a) Each label required by § 181.7 must contain—

(1) The name and address of the manufacturer or private label merchandiser who certifies that the boat or item of associated equipment complies with the standards prescribed in Part 183 of this subchapter; and

(2) Except as provided in paragraph (c) of this section, the words—

(i) "This (insert "Boat" or "Equipment") Complies With U.S. Coast Guard Safety Standards In Effect On (insert date of certification as prescribed in paragraph (b) of this section)"; or

(ii) If the item being certified is a boat or boat hull, the label may show the words, "This Boat Complies with U.S. Coast Guard Safety Standards In Effect On The Date of Certification."

(b) Date of certification must be no earlier than the date on which construction or assembly began and no later than the date on which the boat or item of associated equipment leaves the place of manufacture or assembly or import for the purposes of sale.

(c) If a boat displays the stability warning label required by § 183.23 of this subchapter, the words "Except Load Capacity" must be inserted after the words "Safety Standards" and before "In Effect" in the statement prescribed by paragraph (a) (2) of this section.

(d) Except as provided in paragraph (e) of this section, the manufacturer may, in addition to the information required by paragraphs (a), (b), and (c) of this section, display on the certification label any or all of the following items of information:



- (1) Model name or designation.
- (2) Hull identification number (if a boat) or serial number (if an item of associated equipment).
- (3) Model year.
- (e) Display of the hull identification number on the certification label does not satisfy the display requirements of § 181.29.

**§ 181.17 Label numbers and letters.**

Letters and numbers on each label must—

- (a) Be no less than one-eighth of an inch in height; and
- (b) Contrast with the basic color of the label, except that the date of certification may be permanently stamped, engraved, or embossed on the label.

**§ 181.19 Construction of labels.**

- (a) Each label must be made of material that can withstand exposure to water, oil, salt spray, direct sunlight, heat, cold, and wear expected in normal use of the boat or item of associated equipment without deterioration of legibility.
- (b) Each label must be made of material that shows visible traces of the alteration or removal of information on the label.

**Subpart C—Identification of Hulls****§ 181.21 Purpose and applicability.**

This subpart prescribes the requirements for identification of hulls of boats to which section 4 of the Federal Boat Safety Act of 1971 applies.

**§ 181.23 Hull identification numbers required.**

Except as provided in paragraph (b) of this section—

- (a) Each manufacturer of a boat hull shall identify that hull with a hull identification number that meets the requirements of this subpart;
- (b) Each person who imports a boat or boat hull shall identify that hull with a hull identification number that meets the requirements of this subpart, unless the manufacturer of that hull or boat has already identified the hull with a hull identification that meets the requirements of this part; and
- (c) No person may assign the same first eight characters of a hull identification number to more than one boat hull.

**§ 181.25 Hull identification number format.**

Each hull identification number required by § 181.23 must consist of 12 characters as follows:

- (a) The first three characters must consist of a manufacturer identification assigned under § 181.31.
- (b) Characters 4 through 8 must be assigned by the manufacturer and must be letters of the English alphabet or Arabic numerals or both, except the letters I, O, and Q.
- (c) Characters 9 through 12 must indicate the date of certification. The characters must be either—

(1) Arabic numerals with characters 9 and 10 indicating the month and characters 11 and 12 indicating the last two numerals of the year; or

(2) A combination of Arabic numerals and letters of the English alphabet with character 9 indicated as "M," characters 10 and 11 the last two numerals of the model year, and character 12 the month of the model year. The first month of the model year, August, must be designated by the letter "A," the second month, September, by the letter "B," and so on until the last month of the model year, July.

**§ 181.27 Additional characters in hull identification number.**

A manufacturer may display additional characters after the 12 characters required by § 181.25 if they are separated from the hull identification number by a hyphen.

**§ 181.29 Hull identification number display.**

(a) The hull identification number must be carved, burned, stamped, embossed, or otherwise permanently affixed to the outboard side of the transom or, if there is no transom, to the outermost starboard side at the end of the hull that bears the rudder or other steering mechanism, above the waterline of the boat in such a way that alteration, removal, or replacement would be obvious and evident.

(b) The characters of the hull identification number must be no less than one-fourth of an inch in height.

**§ 181.31 Manufacturer identification assigned.**

(a) Each person required by § 181.23 to affix a hull identification number may request a manufacturer identification

from the Commandant (GBBC), 400 Seventh Street SW., Washington, DC 20590. There is no charge for the assignment.

## PART 183—BOATS AND ASSOCIATED EQUIPMENT

### Subpart A—General

- Sec.  
183.1 Purpose and applicability.  
183.3 Definitions.

### Subpart B—Display of Capacity Information

- 183.21 Applicability.  
183.23 Capacity marking required.  
183.25 Display of markings.  
183.27 Construction of markings.

### Subpart C—Safe Loading

- 183.31 Applicability.  
183.33 Maximum weight capacity: Inboard and inboard-outdrive boats.  
183.35 Maximum weight capacity: Outboard boats.  
183.37 Maximum weight capacity: Boats without mechanical propulsion.  
183.39 Persons capacity: Inboard and inboard-outdrive boats.  
183.41 Persons capacity: Outboard boats.  
183.43 Persons capacity: Boats without mechanical propulsion.

### Subpart D—Safe Powering

- 183.51 Applicability.  
183.53 Horsepower capacity.

### Subpart E—Flotation

- 183.61 Applicability.  
183.63 Quantity of flotation required.  
183.65 Flotation materials.  
183.67 Method for determining quantity of flotation.

**AUTHORITY:** The provisions of this Part 183 issued under secs. 5, 7, and 39, 85 Stat. 213, 215, 216, 228 (46 U.S.C. 1454, 1456, 1458; 49 CFR 1.46(o)(1)).

**SOURCE:** OGD 72-61R, 37 FR 15782, Aug. 4, 1972, unless otherwise noted.

### Subpart A—General

#### § 183.1 Purpose and applicability.

This part prescribes standards and regulations for boats and associated equipment to which section 12 of the Federal Boat Safety Act of 1971 applies and to which certification requirements in Part 181 of this subchapter apply.

#### § 183.3 Definitions.

(a) "Beam" means the transverse distance between the outer sides of the boat

excluding handles, and other similar fittings, attachments, and extensions.

(b) "Boat" means any vessel manufactured or used primarily for noncommercial use; leased, rented, or chartered to another for the latter's noncommercial use; or engaged in the carrying of six or fewer passengers.

(c) "Full transom" means a transom with a maximum width which exceeds one-half the maximum beam of the boat.

(d) "Length" means the straight line horizontal measurement of the overall length from the foremost part of the boat to the aftermost part of the boat, measured from end to end over the deck excluding sheer, and measured parallel to the centerline. Bow sprits, bumpkins, rudders, outboard motor brackets, handles, and other similar fittings, attachments, and extensions are not included in the measurement.

(e) "Monohull boat" means a boat on which the line of intersection of the water surface and the boat at any operating draft forms a single closed curve. For example, a catamaran, trimaran, or a pontoon boat is not a monohull boat.

(f) "Remote steering" means any mechanical assist device which is rigidly attached to the boat and used in steering the vessel, including but not limited to mechanical, hydraulic, or electrical control systems.

(g) "Sailboat" means a boat designed or intended to use sails as the primary means of propulsion.

(h) "Sheer" means the topmost line in a boat's side. The sheer intersects the vertical centerline plane of the boat at the forward end and intersects the transom (stern) at the aft end. For the purposes of this definition, the topmost line in a boat's side is the line defined by a series of points of contact with the boat structure, by straight lines at 45 degree angles to the horizontal and contained in a vertical plane normal to the outside edge of the boat as seen from above and which are brought into contact with the outside of the horizontal boat. A boat is horizontal when it is transversely level and when the lowest points at 40 percent and 75 percent of the boat's length behind the most forward point of the boat are level.

(i) "Transom" means the surface at the stern of a boat projecting or facing aft. The upper boundary of the transom is the line defined by a series of points of contact, with the boat structure, by

straight lines at 45 degree angles to the horizontal and contained in a vertical longitudinal plane and which are brought into contact with the stern of the horizontal boat. A boat is horizontal when it is transversely level and when the lowest points at 40 percent and 75 percent of the boat's length behind the most forward point of the boat are level.

(j) "Vessel" includes every description of watercraft, other than a seaplane on the water, used or capable of being used as a means of transportation on the water.

[CGD 73-250, 40 FR 43856, Sept. 23, 1975]

### Subpart B—Display of Capacity Information

#### § 183.21 Applicability.

This subpart applies to monohull boats less than 20 feet in length, except sailboats, canoes, kayaks, and inflatable boats.

#### § 183.23 Capacity marking required.

(a) Except as provided in paragraph (b), each boat must be marked in the

manner prescribed in §§ 183.25 and 183.27 with the maximum weight capacity, maximum persons capacity determined under §§ 183.33 through 183.43, and maximum horsepower capacity determined under § 183.53.

(b) Any boat, the construction or assembly of which begins before August 1, 1973, may have displayed thereon a maximum persons capacity greater than that determined in §§ 183.39 through 183.43 if the maximum persons capacity displayed does not exceed the maximum weight capacity and the boat displays at least two stability warning labels prescribed in paragraph (c) of this section.

(c) Each of the stability warning labels required by paragraph (b) of this section must—

- (1) Be waterproof;
- (2) Be displayed at normal boarding positions; and
- (3) Have a plan view of the boat and the words in block letters in the sizes shown in figure 183.23 in colors that contrast with the background of the label.

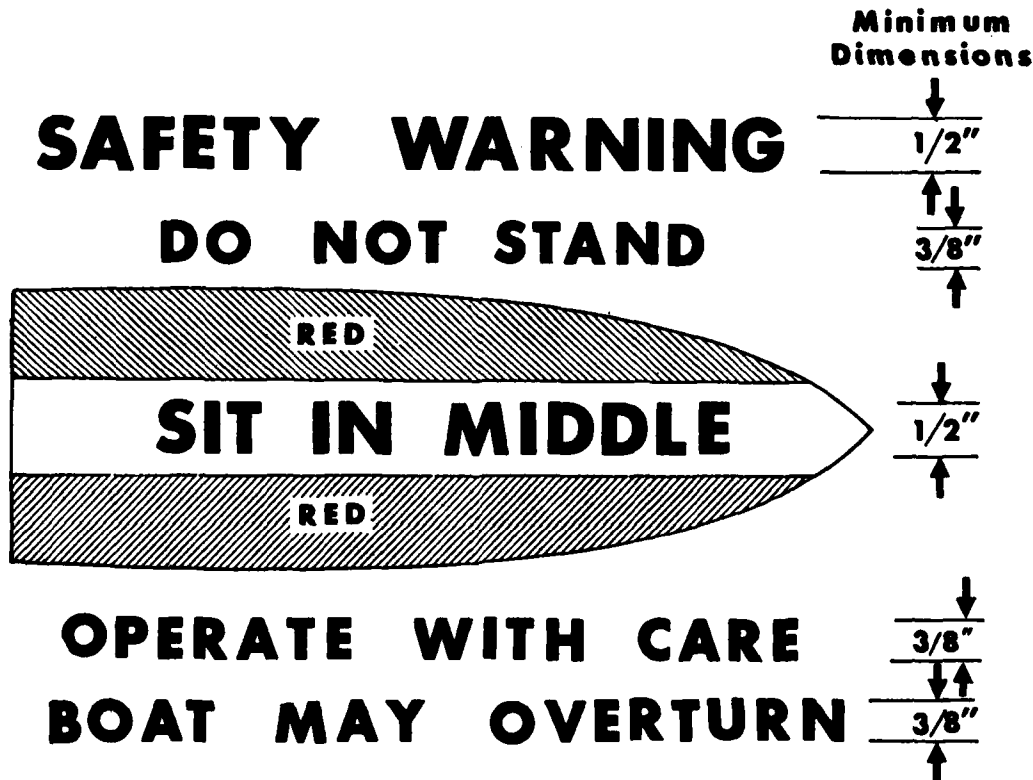


Figure 183.23

§ 183.25 Display of markings.

(a) Each marking required by § 183.23 (a) must be permanently displayed in a legible manner where it is clearly visible to the operator when he is getting the boat underway.

(b) The information required to be marked by § 183.23(a) must be displayed in the following manner—

(1) For outboard boats:

U.S. COAST GUARD CAPACITY INFORMATION

Maximum horsepower..... XXX  
Maximum persons capacity (pounds).... XXX  
Maximum weight capacity (persons,  
motor, and gear) (pounds)..... XXX

or

U.S. COAST GUARD CAPACITY INFORMATION

Maximum horsepower:  
With remote steering..... XXX  
Without remote steering..... XXX  
Maximum persons capacity (pounds).... XXX  
Maximum weight capacity (persons,  
motor, and gear) (pounds)..... XXX

(2) For inboard boats and inboard outdrive boats:

U.S. Coast Guard Capacity Information

Maximum persons capacity (pounds).... XXX  
Maximum weight capacity (persons  
and gear) (pounds)..... XXX

(3) For boats rated for motors of two horsepower or less:

U.S. COAST GUARD CAPACITY INFORMATION

Maximum horsepower..... XXX  
Maximum persons capacity..... XXX  
Maximum weight capacity (persons,  
and gear) (pounds)..... XXX

(4) For boats rated for manual propulsion:

U.S. COAST GUARD CAPACITY INFORMATION

This boat rated for manual propulsion.  
Maximum persons capacity (pounds).... XXX  
Maximum weight capacity (persons,  
and gear) (pounds)..... XXX

CGD 72-61R, 37 FR 15782, Aug. 4, 1972, as amended at 39 FR 10899, Mar. 22, 1974; CGD 73-250, 40 FR 43856, Sept. 23, 1975 ; CGD 74-286, 42 FR 48667, Jan 13, 1977

§ 183.27 Construction of markings.

Each marking required by § 183.23(a) must be—

(a) Capable of withstanding the combined effects of exposure to water, oil, salt spray, direct sunlight, heat, cold, and wear expected in normal operation of the boat, without loss of legibility; and

(b) Resistant to efforts to remove or alter the information without leaving some obvious sign of such efforts.

Subpart C—Safe Loading

§ 183.31 Applicability.

This subpart applies to monohull boats less than 20 feet in length except sailboats, canoes, kayaks, and inflatable boats.

§ 183.33 Maximum weight capacity: Inboard and inboard-outdrive boats.

(a) The maximum weight capacity (W) marked on a boat that has one or more inboard or inboard-outdrive units for propulsion must not exceed the greater value of W obtained from either of the following formulas:

$$W = \frac{(\text{maximum displacement})}{8} - \frac{\text{boat weight}}{8} - \frac{4(\text{machinery weight})}{8}$$

or

$$W = \frac{(\text{maximum displacement} - \text{boat weight})}{7}$$

(b) For the purposes of paragraph (a) of this section—

(1) "Maximum displacement" is the weight of the volume of water displaced by the boat at its maximum level immersion in calm water without water coming aboard. For the purpose of this paragraph, a boat is level when it is transversely level and when either of the two following conditions are met:

(i) The forward point where the sheer intersects the vertical centerline plane and the aft point where the sheer intersects the upper boundary of the transom (stern) are equidistant above the water surface or are equidistant below the water surface.

(ii) The most forward point of the boat is level with or above the lowest point of water ingress.

(2) "Boat weight" is the combined weight of the boat hull and all its per-

manent appurtenances, including machinery weight.

(3) "Machinery weight" is the combined weight of installed engines or motors, full fuel system and tanks, control equipment, drive units and batteries. [OGD 72-61R, 37 FR 15782, Aug. 4, 1972, as amended at 39 FR 10899, Mar. 23, 1974; OGD 74-83, 40 FR 33973, Aug. 13, 1975; OGD 73-350, 40 FR 43857, Sept. 23, 1975; OGD 74-83, 40 FR 51440, Nov. 5, 1975]

§ 183.35 Maximum weight capacity:  
    . Outboard boats.

(a) The maximum weight capacity marked on a boat that is designed or intended to use one or more outboard motors for propulsion must be a number that does not exceed one-fifth of the difference between its maximum displacement and boat weight.

(b) For the purposes of paragraph (a) of this section—

(1) "Maximum displacement" is the weight of the volume of water displaced by the boat at its maximum level immersion in calm water without water coming aboard except for water coming through one opening in the motor well with its greatest dimension not over 3 inches for outboard motor controls or fuel lines. For the purpose of this paragraph, a boat is level when it is transversely level and when either of the two following conditions are met:

(i) The forward point where the sheer intersects the vertical centerline plane and the aft point where the sheer intersects the upper boundary of the transom (stern) are equidistant above the water surface or are equidistant below the water surface.

(ii) The most forward point of the boat is level with or above the lowest point of water ingress.

(2) "Boat weight" is the combined weight of the boat hull and all its permanent appurtenances. For the purposes of this paragraph, outboard motors are not permanent appurtenances.

[CGD 72-61, 37 FR 15782, Aug. 4, 1972, as amended by CGD 73-250, 40 FR 43857, Sept. 23, 1975]

**§ 183.37 Maximum weight capacity: Boats without mechanical propulsion.**

(a) The maximum weight capacity marked on a boat that is not designed intended to have mechanical propulsion must not exceed one-fifth of the difference between the boat's maximum displacement and the boat weight.

(b) For the purposes of paragraph (a) of this section—

(1) "Maximum displacement" is the weight of the volume of water displaced by the boat at its maximum level immersion in calm water without water coming aboard. For the purpose of this paragraph, a boat is level when it is transversely level and when either of the two following conditions are met:

(i) The forward point where the sheer intersects the vertical centerline plane and the aft point where the sheer intersects the upper boundary of the transom (stern) are equidistant above the water surface or are equidistant below the water surface.

(ii) The most forward point of the boat is level with or above the lowest point of water ingress.

(2) "Boat weight" is the combined weight of the boat and all its permanent appurtenances.

[CGD 72-61R, 37 FR 15782, Aug. 4, 1972, as amended at 39 FR 10899, Mar. 22, 1974; CGD 73-250, 40 FR 43857, Sept. 23, 1975]

**§ 183.39 Persons capacity: Inboard and inboard-outdrive boats.**

The persons capacity marked on a boat that is designed or intended to use one or more inboard engines or inboard-outdrive units must not exceed the lesser of the maximum weight capacity determined under § 183.33 for the boat or the maximum persons capacity determined by the following test in calm water:

(a) Float the boat, with all its permanent appurtenances, including installed engines, full fuel system and tanks, control equipment, drive units, and batteries.

(b) Gradually add weights along one outboard extremity of each passenger carrying area, at the height of the seat nearest the center of that area and distributed equally forward and aft of that center in a plane parallel to the floorboards, until the boat assumes the maximum list or trim, or both, without water coming aboard.

(c) Compute the persons capacity in the following formula:

Persons capacity =  $\frac{A}{0.6}$  where  $A$  is the total of the weights added in paragraph (b) of this section.

**§ 183.41 Persons capacity: Outboard boats.**

The persons capacity marked on a boat that is designed or intended to use one or more outboard motors for propulsion must not exceed the lesser of the maximum weight capacity determined under § 183.35 for the boat or the live load capacity determined by the following test in calm water:

(a) Float the boat with all its permanent appurtenances.

(b) Add, in normal operating positions, the dry motor and control weight, battery weight, and portable tank weight, if any, shown in Table 183.67(a) for the maximum horsepower capacity marked on the boat. For permanently installed fuel tanks, add 6 pounds of weight for each gallon of fuel capacity.

(c) Gradually add weights along one outboard extremity of each passenger carrying area, at the height of the seat

nearest the center of that area and distributed equally forward and aft of that center in a plane parallel to the floorboards until the boat assumes the maximum list or trim, or both, without water coming aboard.

(d) Compute the persons capacity in the following formula:

Persons capacity =  $\frac{A}{0.6}$  where A is the total of the weights added in paragraph (c) of this section.

**§ 183.43 Persons capacity: Boats without mechanical propulsion.**

The persons capacity marked on a boat that is not designed or intended to have mechanical propulsion must not exceed the lesser of the maximum weight capacity determined under § 183.37 for the boat or the live load capacity determined by the following test in calm water:

(a) Float the boat, with all its permanent appurtenances.

(b) Gradually add weights along one outboard extremity of each passenger carrying area at the height of the seat nearest the center of that area and distributed equally forward and aft of that center in a plane parallel to the floorboards until the boat assumes the maximum list or trim, or both, without water coming aboard.

(c) Compute the persons capacity in the following formula:

Persons capacity =  $\frac{A}{0.6}$  where A is the total of the weights added in paragraph (b) of this section.

**Subpart D—Safe Powering**

**§ 183.51 Applicability.**

This subpart applies to monohull boats less than 20 feet in length, except sailboats, canoes, kayaks, and inflatable boats, that are designed or intended to use one or more outboard motors for propulsion.

**§ 183.53 Horsepower capacity.**

The maximum horsepower marked on a boat must not exceed the horsepower capacity determined as follows:

(a) Compute a factor by multiplying the boat length in feet by the maximum transom width in feet excluding handles, and other similar fittings, attachments, and extensions. If the boat does not have a full transom, the transom width is the broadest beam in the aftermost quarter length of the boat.

(b) Locate horsepower capacity corresponding to the factor in Table 183.53.

(c) If the horsepower capacity in Table 183.53 is not an even multiple of 5, it may be raised to the next even multiple of 5.

**TABLE 183.53—OUTBOARD BOAT HORSEPOWER CAPACITY**  
COMPUTE: FACTOR = BOAT LENGTH X TRANSOM WIDTH

If factor (nearest integer) is.....	0-35	36-42	43-45	46-52
Horsepower capacity is.....	5	7½	10	15

**NOTE:** For flat bottom hard chine boats, with factor of 52 or less, reduce one capacity increment (e.g. 5 to 3)

If factor is over 52.5 and the boat has.....	Remote steering and at least 20" transom height	No remote steering, or less than 20" transom	
		For flat bottom hard chine boats	For other boats
Horsepower capacity is (raise to nearest multiple of 5).....	(2 X Factor) - 90	(0.5 X Factor) - 15	(0.5 X Factor) - 25

(d) For flat bottom hard chine boats with a factor of 52 or less, the horsepower capacity must be reduced by one horsepower capacity increment in Table 183.53.

[CGD 72-61R, 37 FR 15782, Aug. 4, 1972, as amended at 37 FR 17388, Aug. 26, 1972; CGD 73-280, 40 FR 43387, Sept. 23, 1975]

**Subpart E—Flotation**

**§ 183.61 Applicability.**

This subpart applies to monohull boats the construction or assembly of which is begun after July 31, 1973, and which are less than 20 feet in length, except sail-

boats, canoes, kayaks, and inflatable boats.

### § 183.63 Quantity of flotation required.

Each boat must have—

(a) At least that quantity of flotation prescribed in § 183.67; or

(b) Enough flotation to keep any portion of the boat above the surface of the water when the boat is filled with water and loaded with—

(1) A weight that, when submerged, equals two-fifteenths of the persons capacity marked on the boat; and

(2) A weight that, when submerged, equals 25 percent of the dead weight; and

(3) A weight in pounds that, when submerged, equals 62.4 times the volume of the two largest air chambers, if air chambers are used for flotation; and

(4) For outboard motor boats, a weight that, when submerged, equals the submerged motor and control weight from Table 183.67(a).

(c) For the purpose of this section, "dead weight" means—

(1) For outboard boats and boats without mechanical propulsion, the maximum weight capacity marked on the boat minus the sum of—

(i) Motor and control weight, and battery weight (dry) from Table 183.67(a); and

(ii) The persons capacity determined under § 183.41 for the boat, and

(2) For inboard boats, the maximum weight capacity marked on the boat minus the persons capacity determined under § 183.39 for the boat.

### § 183.65 Flotation materials.

(a) The flotation required by § 183.63 must be made of materials that are—

(1) Capable of withstanding the combined effects of contact with oil, oil products, or other liquids or compounds with which the material may be expected to come in contact during normal use, including fuel oil, gasoline, grease, lubricating oil, common bilge solvents, and salt and fresh water;

(2) Capable of withstanding combined exposure to sunlight, vibration, shock, and temperature variations which may be expected during normal use;

(3) Installed in such a manner that the flotation is fully effective when the boat is flooded or capsized.

(b) Any air chamber used for flotation must not be an integral part of the hull.

### § 183.67 Method for determining quantity of flotation.

The minimum quantity of flotation required by § 183.63(a) must be determined by the following method:

(a) Step 1: Determine the Submerged Weight of Boat ( $W_s$ ) in the formula:

$$W_s = W_h K_1 + W_d K_2 + 0.69 W_e$$

Where:

$W_s$  = Submerged weight of boat.

$W_h$  = Dry weight of hull.

$W_d$  = Dry weight of decks and superstructure.

$W_e$  = Dry weight of permanent appurtenances except motor and control weight, battery weight, and portable tank weight.

$K_1$  and  $K_2$  = Conversion factors for materials used from Table 183.67(b).

(b) Step 2: Determine submerged weight of engine and related equipment ( $G$ ) as follows:

(1) For outboard boats,  $G$  equals the sum of the submerged motor and control weight, battery weight, and full fuel tank weight from Table 183.67(a) for maximum horsepower capacity marked on the boat in accordance with § 183.53.

(2) For inboard boats  $G$  equals 75 percent of the installed weight of engine, drive, and fuel system.

(c) Step 3: Determine dry weight of load ( $C$ ) as follows:

(1) For outboard boats,  $C$  equals the maximum weight capacity as determined in § 183.35 minus the sum of dry motor and control weight, battery weight, and full fuel tank weight from Table 183.67(a).

(2) For inboard boats,  $C$  equals the maximum weight capacity as determined in § 183.33.

(d) Step 4: Determine flotation required ( $W$ ) in the formula:

$$W = W_s (\text{Step 1}) + G (\text{Step 2}) + 0.25 C (\text{Step 3}).$$

(e) Step 5: Determine the volume of flotation material ( $F$ ) needed in the formula:

$$F = \frac{\text{Flotation required (W)}}{\text{Buoyancy of flotation material} + \text{Chamber volume (V)}}$$

where: "Flotation required" is that value of  $W$  determined in Step 4; "Chamber volume" is the volume of the two largest air chambers, if air chambers are used for flotation; and "Buoyancy of flotation material" is determined by subtracting



from the density of fresh water the density of the flotation material. The density of the flotation material must be determined after the material has been

immersed in fresh water for one-half hour. When air chambers are used, the "Buoyancy of flotation material" is 62.4 lbs./ft.<sup>3</sup>

TABLE 183.67(a).—WEIGHTS (IN POUNDS) OF OUTBOARD MOTOR AND RELATED EQUIPMENT FOR VARIOUS BOAT HORSEPOWER RATINGS

Boat horsepower rating	Motor and control weight		Battery weight		Full portable fuel tank weight <sup>2</sup>	
	Dry	Wet <sup>1</sup>	Dry	Wet <sup>1</sup>	Dry	Wet <sup>1</sup>
Under 4.0.....	35	20				
4.0 to 5.....	55	34			25	-1
5.1 to 10.....	70	55	20	11	50	-1
10.1 to 30.....	105	86	45	25	50	-1
30.1 to 50.....	196	188	45	25	100	-3
50.1 to 75.....	240	173	45	25	100	-3
75.1 to 150.....	305	218	45	25	100	-3
150.1 to 250.....	420	300	45	25	100	-3
Transoms designed for twin motors:						
60.0 to 100.....	380	268	45	25	100	-3
100.1 to 150.....	480	328	45	25	100	-3
150.1 to 300.....	610	413	45	25	100	-3

<sup>1</sup> Wet in this case means submerged.

<sup>2</sup> If boat has a permanent built-in fuel tank, the tank should be full for the test and the "full portable fuel tank weight" excluded.

TABLE 183.67(b)

FACTORS FOR CONVERTING VARIOUS BOAT MATERIALS FROM DRY TO SUBMERGED WEIGHT

Material	Sp. Gr.	Factor
Steel.....	7.85	0.88
Aluminum.....	2.73	0.68
Fiberglass.....	1.50	0.33
A.B.S.....	1.12	0.11
Oak.....	0.68	-0.56
Mahogany.....	0.55	-0.78
Ash.....	0.56	-0.78
Yellow Pine.....	0.55	-0.81
Fir Plywood.....	0.55	-0.81
Mahogany Plywood.....	0.54	-0.83
Royalux.....	0.50	-0.95
Cedar.....	0.38	-1.06
Balsa and grain.....	0.16	-3.24

[OGD 72-61R, 37 FR 18782, Aug. 4, 1972, as amended at 37 FR 17388, Aug. 28, 1972; 39 FR 10699, Mar. 22, 1974; CGD 75-110, 41 FR 11290, Mar. 18, 1976]

**Subpart F—Flotation Requirements for Inboard Boats, Inboard/Outdrive Boats, and Airboats**

**Sec.**

**183.101** Applicability.

**183.105** Quantity of flotation required.

**183.110** Flotation materials and air chambers.

**Subpart F—Flotation Requirements for Inboard Boats, Inboard/Outdrive Boats, and Airboats**

**§ 183.101 Applicability.**

This subpart applies to monohull inboard boats, inboard/outdrive boats, and airboats less than 20 feet in length, the construction or assembly of which is begun after July 31, 1978, except sailboats, canoes, kayaks, inflatable boats, submersibles, surface effect vessels, amphibious vessels, and raceboats.

**§ 183.105 Quantity of flotation required.**

(a) Each boat must have enough flotation to keep any portion of the boat above the surface of the water when the boat has been submerged in calm, fresh water for at least 18 hours and loaded with—

(1) A weight that, when submerged, equals two-fifteenths of the persons capacity marked on the boat;

(2) A weight that, when submerged, equals 25 percent of the dead weight; and

(3) A weight in pounds that when submerged, equals 62.4 times the volume in cubic feet of the two largest air chambers, if air chambers are used for flotation.

(b) For the purpose of this section, "dead weight" means the maximum weight capacity marked on the boat minus the maximum persons capacity marked on the boat.

**§ 183.110 Flotation materials and air chambers.**

(a) As installed in a boat, flotation materials must withstand—

(1) The combined effects of contact with oil, oil products, or other liquids or compounds with which the material may be expected to come in contact during normal use; and

(2) The combined effects of exposure to sunlight, vibration, shock, and temperature variations expected during normal use.

(b) Air chambers used to meet the flotation requirements of this subpart must not be integral with the hull.

**Subpart G—Flotation Requirements for Outboard Boats Rated for Engines of More Than 2 Horsepower**

**GENERAL**

**Sec.**

- 183.201 Applicability.
- 183.202 Flotation requirements.
- 183.205 Passenger carrying area.
- 183.210 Reference areas.
- 183.215 Reference depth.
- 183.220 Preconditioning for tests.
- 183.222 Flotation material and air chambers.
- 183.225 Flotation test for persons capacity.
- 183.230 Stability test.
- 183.235 Level flotation test without weights for persons capacity.

**Subpart G—Flotation Requirements for Outboard Boats Rated for Engines of More Than 2 Horsepower**

**GENERAL**

**§ 183.201 Applicability.**

(a) This subpart applies to monohull outboard boats that are—

- (1) Less than 20 feet in length;
- (2) Rated for outboard engines of more than 2 horsepower; and
- (3) Constructed or assembled after July 31, 1978.

(b) This subpart does not apply to sailboats, canoes, kayaks, inflatable boats, submersibles, surface effect vessels, amphibious vessels, and raceboats.

**§ 183.202 Flotation and certification requirements.**

Each boat to which this subpart applies must be manufactured, constructed, or assembled to pass the stability and flotation tests prescribed in §§ 183.225 (a), 183.230(a), and 183.235(a).

**§ 183.205 Passenger carrying area.**

(a) For the purpose of this section a boat is level when it is supported on its keel at the two points shown in Figure 1.

(b) As used in this subpart, the term "passenger carrying area" means each area in a boat in which persons can sit in a normal sitting position or stand while the boat is in operation. Passenger carrying areas are illustrated in Figures 2, 3, and 4.

(c) The length of the passenger carrying area is the distance along the centerline of the boat between two vertical lines, one at the forward end and one at the aft end of the passenger carrying area, when the boat is level as illustrated in Figures 2 and 3. For boats with a curved stem inside the passenger carrying area, the forward vertical line is

where a line 45 degrees to the horizontal when the boat is level is tangent to the curve of the stem, as illustrated in Figure 4.

(d) The breadth of each passenger carrying area is the distance between two vertical lines at the mid-length, excluding consoles, of the passenger carrying area when the boat is level as illustrated in Figures 5 and 6. For boats with round chines inside the passenger carrying area, the vertical line is where a transverse line 45 degrees to the horizontal is tangent to the arc of the chine, as illustrated in Figure 6.

**§ 183.210 Reference areas.**

(a) The forward reference area of a boat is the forward most 2 feet of the top surface of the hull or deck, as illustrated in Figure 7.

(b) The aft reference area of a boat is the aft most two feet of the top surface of the hull or deck, as illustrated in Figure 7.

**§ 183.215 Reference depth.**

Reference depth is the minimum distance between the upper most surface of the submerged reference area of a boat and the surface of the water measured at the centerline of the boat, as illustrated in Figure 8. If there is no deck surface at the centerline of the boat from which a measurement can be made, the reference depth is the average of two depth measurements made on opposite sides of, and at an equal distance from, the centerline of the boat.

**§ 183.220 Preconditioning for tests.**

A boat must meet the following conditions for at least 18 hours before the tests required by §§ 183.225, 183.230, and 183.235:

(a) Manufacturer supplied permanent appurtenances such as windshields, convertible tops, and propellers must be installed on the boat.

(b) The boat must be loaded with a quantity of weight that, when submerged, is equal to the sum of the following:

- (1) The sum of 50 percent of 550 pounds of the persons capacity marked on the boat and 12½ percent of the remainder of the persons capacity.

- (2) Twenty-five percent of the result of the following calculation, but not less than zero: the maximum weight capacity marked on the boat; less the weight shown in Column 6 of Table I for maximum horsepower marked on the boat; less the persons capacity marked on the boat.

(c) The weights required by paragraph (b) of this section must be placed in the boat so that the center of gravity of each amount of weight required by paragraphs (b) (1) and (b) (2) of this section is within the shaded area illustrated in Figure 9. The location and dimensions of the shaded area are as follows:

(1) the shaded area is centered at the mid-length of the passenger carrying area and at the mid-breadth of the boat;

(2) the length of the shaded area, measured along the centerline of the boat, is equal to 40 percent of the length of the passenger carrying area of the boat; and

(3) the breadth of the shaded area, measured at the midlength of the passenger carrying area, is equal to 40 percent of the breadth of the passenger carrying area of the boat.

(d) Weight must be placed in the normal operating position of the motor and controls and the battery in lieu of this equipment. The required quantity of weight used for this purpose depends upon the maximum rated horsepower of the boat being tested and is specified in Columns 2 and 4 of Table I for the swamped weight of the motor and controls and for the submerged weight of the battery, respectively.

(e) Permanent fuel tanks must be filled with fuel and each external opening into the fuel tank must be sealed.

(f) The boat must be keel down in the water.

(g) The boat must be swamped, allowing water to flow between the inside and outside of the boat, either over the sides, through a hull opening, or both. Entrapped air in the flooded portion of the boat must be eliminated.

(h) Water must flood the two largest air chambers and all air chambers integral with the hull.

#### **§ 183.222 Flotation material and air chambers.**

(a) As installed in a boat, flotation materials must withstand—

(1) The combined effects of contact with oil, oil products, or other liquids or compounds with which the material may be expected to come in contact during normal use; and

(2) The combined effects of exposure to sunlight, vibration, shock, and temperature variations expected during normal use.

(b) Air chambers used to meet the flotation requirements of this subpart must not be integral with the hull.

#### **TESTS**

#### **§ 183.225 Flotation test for persons capacity.**

*Flotation standard.* When the conditions prescribed in § 183.220 are met, the boat must float in fresh, calm water as follows:

(a) The angle of heel does not exceed 10 degrees from the horizontal.

(b) Any point on either the forward or aft reference area is above the surface of the water.

(c) The reference depth at the reference area that is opposite the reference area that is above the surface of the water is 6 inches or less.

#### **§ 183.230 Stability test.**

(a) *Flotation standard.* When the conditions prescribed in § 183.220 (a), (d) through (h) and paragraphs (b) and (c) of this section are met, the boat must float in fresh, calm water as follows:

(1) The angle of heel does not exceed 30 degrees from the horizontal.

(2) Any point on either the forward or aft reference area is above the surface of the water.

(3) The reference depth at the reference area that is opposite the reference area that is above the surface of the water is 12 inches or less.

(b) *Quantity of weight used.* Load the boat with a quantity of weight that, when submerged, is equal to the sum of the following:

(1) One-half of the quantity of weight required by § 183.220 (b) (1).

(2) The quantity of weight required by § 183.220 (b) (2).

(c) *Placement of quantity of weight: starboard side.* Place the weight required by paragraph (b) of this section in the boat so that—

(1) The quantity of weight required by § 183.220 (b) (2) is positioned in accordance with § 183.220 (c); and

(2) One-half the quantity of weight required by § 183.220 (b) (1) is uniformly distributed over a distance along the outboard perimeter of the starboard side of the passenger carrying area that is equal to at least 30 percent of the length of the passenger carrying area so that the center of gravity of the quantity of weight is located within the shaded area illustrated in Figure 10, the center of

gravity of each weight placed on the floor of the boat is at least 4 inches above the floor, and the center of gravity of each weight placed on a seat is at least 4 inches above the seat. The location and dimensions of the shaded area are as follows:

(i) The shaded area is centered at the mid-length of the passenger carrying area;

(ii) The length of the shaded area is equal to 70 percent of the length of the passenger carrying area; and

(iii) The breadth of the shaded area is 6 inches from—

(A) For weights placed on the floor, the outboard perimeter of the passenger carrying area; and

(B) For weights placed on a seat, a vertical line inside the passenger carrying area as illustrated in Figure 11.

(d) *Placement of quantity of weight: port side.* The quantity of weight required by paragraph (b) (1) of this section is placed along the port side of the passenger carrying area in accordance with the conditions prescribed in paragraph (c) (2) of this section.

#### § 183.235 Level flotation test without weights for persons capacity.

When the conditions prescribed in § 183.220(a), (d) through (h) are met, the boat must float in fresh, calm water as follows:

(a) The angle of heel does not exceed 10 degrees from the horizontal.

(b) Any point on either the forward or aft reference area is above the surface of the water.

(c) The reference depth at the reference area that is opposite the reference area that is above the surface of the water is 6 inches or less.

#### Subpart H—Flotation Requirements for Outboard Boats Rated for Engines of 2 Horsepower or Less

##### GENERAL

183.301 Applicability.

183.302 Flotation requirements.

183.305 Passenger carrying area.

183.310 Reference areas.

183.315 Reference depth.

183.320 Preconditioning for tests.

183.322 Flotation material and air chambers.

##### TESTS

183.325 Flotation test for persons capacity.

183.330 Stability test.

183.335 Level flotation test without weights for persons capacity.

#### Subpart H—Flotation Requirements for Outboard Boats Rated for Engines of 2 Horsepower or Less

##### GENERAL

#### § 183.301 Applicability.

(a) This subpart applies to monohull boats that are—

(1) Less than 20 feet in length;

(2) Rated for manual propulsion or outboard engines of 2 horsepower or less; and

(3) Constructed or assembled after July 31, 1978.

(b) This subpart does not apply to sailboats, canoes, kayaks, inflatable boats, submersibles, surface effect vessels, amphibious vessels, and raceboats.

#### § 183.302 Flotation requirements.

Each boat to which this subpart applies must be manufactured, constructed, or assembled to pass the stability and flotation tests prescribed in § 183.325(a), 183.330(a), and 183.335(a).

#### § 183.305 Passenger carrying area.

(a) For the purpose of this section, a boat is level when it is supported on its keel at the two points shown in Figure 1.

(b) As used in this subpart, the term "passenger carrying area" means each area in a boat in which persons can sit in a normal sitting position or stand while the boat is in operation. Passenger carrying areas are illustrated in Figures 2, 3, and 4.

(c) The length of each passenger carrying area is the distance along the centerline of the boat between two vertical lines, one at the forward end and one at the aft end of the passenger carrying area, when the boat is level, as illustrated in Figures 2 and 3. For boats with a curved stem inside the passenger carrying area, the forward vertical line is where a line 45 degrees to the horizontal when the boat is level is tangent to the curve of the stem, as illustrated in Figure 4.

(d) The breadth of the passenger carrying area is the distance between two vertical lines at the mid-length, excluding consoles, of the passenger carrying area when the boat is level as illustrated in Figures 5 and 6. For boats with round chines inside the passenger carrying area, the vertical line is where a transverse line 45 degrees to the horizontal is tangent to the arc of the chine, as illustrated in Figure 6.

#### § 183.310 Reference areas.

(a) The forward reference area of a boat is the forward most 2 feet of the top surface of the hull or deck as illustrated in Figure 7.

(b) The aft reference area of a boat is the aft most two feet of the top surface of the hull or deck, as illustrated in Figure 7.

**§ 183.315 Reference depth.**

Reference depth is the minimum distance between the upper most surface of the submerged reference area of a boat and the surface of the water measured at the centerline of the boat, as illustrated in Figure 8. If there is no deck surface at the centerline of the boat from which a measurement can be made, the reference depth is the average of two depth measurements made on opposite sides of, and at an equal distance from, the centerline of the boat.

**§ 183.320 Preconditioning for tests.**

A boat must meet the following conditions for at least 18 hours before the tests required by §§ 183.325, 183.330, and 183.335:

(a) Manufacturer supplied permanent appurtenances such as windshields, convertible tops, and propellers must be installed on the boat.

(b) The boat must be loaded with a quantity of weight that, when submerged, is equal to the sum of the following:

(1) Two-fifteenths of the persons capacity marked on the boat.

(2) Twenty-five percent of the result of the following calculation, but not less than zero: the maximum weight capacity marked on the boat; less the weight shown in column 6 of Table I for the maximum horsepower marked on the boat; less the persons capacity marked on the boat.

(c) The weights required by paragraph (b) of this section are placed in the boat so that the center of gravity of each amount of weight required by subparagraphs (b) (1) and (b) (2) of this section is within the shaded area illustrated in Figure 9. The location and dimensions of the shaded area are as follows:

(1) the shaded area is centered at the mid-length of the passenger carrying area and at the mid-breadth of the boat;

(2) the length of the shaded area, measured along the centerline of the boat, is equal to 40 percent of the length of the passenger carrying area of the boat; and

(3) the breadth of the shaded area, measured at the mid-length of the passenger carrying area, is equal to 40 percent of the breadth of the passenger carrying area of the boat.

(d) Weight must be placed in the normal operating position of the motor and controls in lieu of this equipment. The quantity of weight used for this purpose depends upon the maximum rated horsepower of the boat being tested and is specified in Column 2 of Table 1 for the swamped weight of the motor and controls.

(e) Permanent fuel tanks must be filled with fuel and each external opening into the fuel tank must be sealed.

(f) The boat must be keel down in the water.

(g) The boat must be swamped, allowing water to flow between the inside and the outside of the boat, either over the sides, through a hull opening, or both. Entrapped air in the flooded portion of the boat must be eliminated.

**§ 183.322 Flotation materials.**

As installed in a boat, flotation materials must withstand—

(a) The combined effects of contact with oil, oil products, or other liquids or compounds with which the material may be expected to come in contact during normal use; and

(b) The combined effects of exposure to sunlight, vibration, shock, and temperature variations expected during normal use.

**§ 183.325 Flotation test for persons capacity.**

*Flotation standard.* When the conditions prescribed in § 183.320 are met, the boat must float in fresh, calm water as follows:

(a) The angle of heel does not exceed 10 degrees from the horizontal.

(b) Any point on either the forward or aft reference area is above the surface of the water.

(c) The reference depth at the reference area that is opposite the reference area that is above the surface of the water is 6 inches or less.

**§ 183.330 Stability test.**

(a) *Flotation standard.* When the conditions prescribed in § 183.320(a), (d) through (g) and paragraphs (b) and (c) of this section are met, the boat must float in fresh, calm water as follows:

(1) The angle of heel does not exceed 30 degrees from the horizontal.

(2) Any point on either the forward or aft reference area is above the surface of the water.

(3) The reference depth at the reference area that is opposite the reference area that is above the surface of the water is 12 inches or less.

(b) *Quantity of weight used.* Load the boat with quantity of weight that, when submerged is equal to the sum of the following:

(1) One-half the quantity of weight required by § 183.320(b)(1).

(2) The quantity of weight required by § 183.320(b)(2).

(c) *Placement of quantity of weight starboard side.* Place the quantity of weight required by paragraph (b) of this section in the boat so that—

(1) The quantity of weight required by § 183.320(b)(2) is positioned in accordance with § 183.320(c); and

(2) One-half the quantity of weight required by § 183.320(b)(1) is uniformly distributed over a distance along the outboard perimeter of the starboard side of the passenger carrying area that is equal to at least 30 percent of the length of the passenger carrying area so that the center of gravity of the quantity of weight is located within the shaded area illustrated in Figure 10, the center of gravity of each weight placed on the floor of the boat is at least 4 inches above the floor and the center of gravity of each weight placed on a seat is at least 4 inches above the seat. The location and dimensions of the shaded area are as follows:

(i) The shaded area is centered at the mid-length of the passenger carrying area;

(ii) The length of the shaded area is equal to 70 percent of the length of the passenger carrying area; and

(iii) The breadth of the shaded area is 6 inches from—

(A) For weights placed on the floor, the outboard perimeter of the passenger carrying area; and

(B) For weights placed on a seat, a vertical line inside the passenger carrying area as illustrated in Figure 11.

(d) *Placement of quantity of weight: port side.* The quantity of weight required by paragraph (b)(1) of this section is placed along the port side of the passenger carrying area in accordance with the conditions prescribed in paragraph (c)(2) of this section.

#### § 183.335 Level flotation test without weights for persons capacity.

When the conditions prescribed in § 183.320(a), (d) through (g) are met, the boat must float in fresh, calm water as follows:

(a) The angle of the heel does not exceed 10 degrees from the horizontal.

(b) Any point on either the forward or aft reference area is above the surface of the water.

(c) The reference depth at the reference area that is opposite the reference area that is above the surface of the water is 6 inches or less.

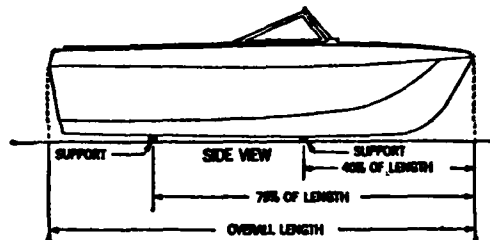


FIGURE 1—LOCATION OF SUPPORTS FOR LEVEL BOAT

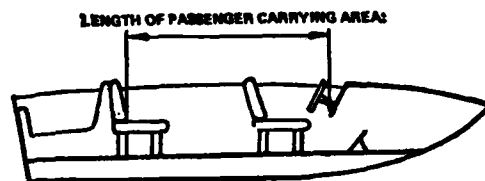


FIGURE 2—BOAT WITH DECK

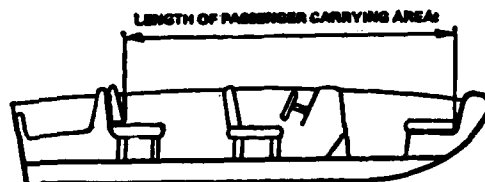


FIGURE 3—BOAT WITH CENTER CONSOLE

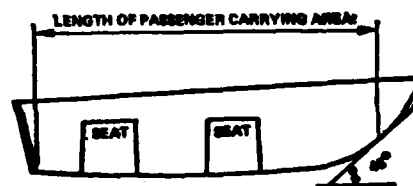


FIGURE 4—OPEN BOAT WITH CURVED STERN

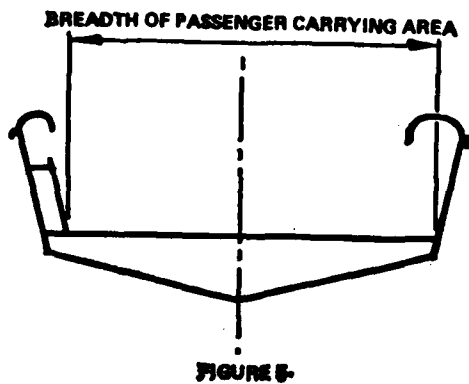


FIGURE 5- PASSENGER CARRYING AREA: LOCATION OF CENTER OF GRAVITY OF WEIGHTS

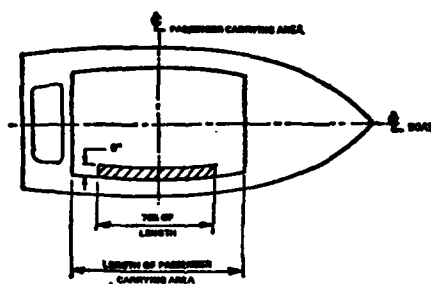
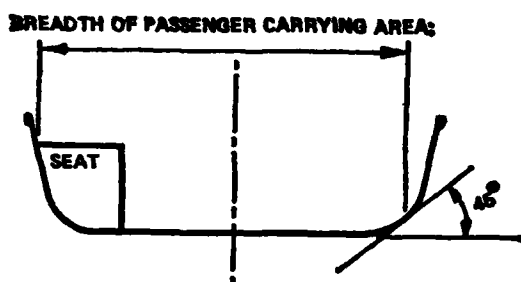
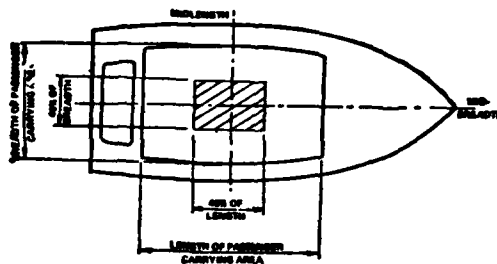


FIGURE 7- STABILITY TEST LOCATION OF CENTER OF GRAVITY OF WEIGHTS: STANDARD USE

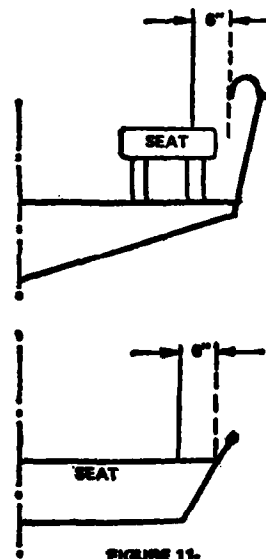
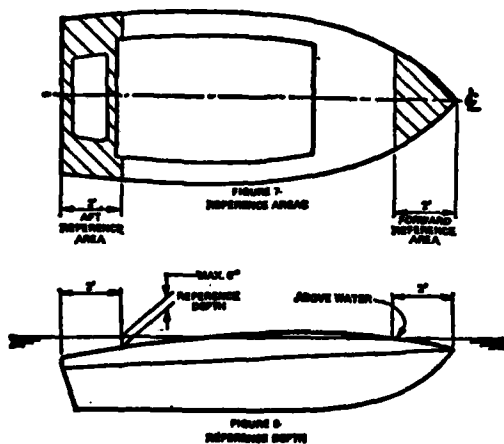


FIGURE 9- LOCATION OF CENTER OF GRAVITY OF WEIGHTS ON SEATS



**TABLE 1.—Weights (pounds) of outboard motor and related equipment for various boat horsepower ratings**

Boat horsepower rating	Column No.					
	1	2	3	4	5	6
	Motor and control weight		Battery weight		Full portable fuel tank weight	1+3+5
	Dry	Swamped	Dry	Submerged		
0.1 to 3.9.....	35	30				35
4.0 to 7.....	55	48			25	80
7.1 to 15.....	75	65	20	11	50	145
15.1 to 25.....	100	88	45	25	50	195
25.1 to 45.....	155	135	45	25	100	300
45.1 to 80.....	240	210	45	25	100	385
80.1 to 150.....	315	275	45	25	100	460
150.1 to 250.....	420	300	45	25	100	565
<b>TRANSOMS DESIGNED FOR TWIN MOTORS</b>						
50.0 to 90.....	310	270	95	50	100	505
90.1 to 160.....	480	420	95	50	100	675
160.1 to 300.....	630	550	95	50	100	825

**Dated: April 21, 1976.**

**D. F. LAUTH,**  
**Rear Admiral, U.S. Coast Guard,**  
**Chief, Office of Boating Safe-**  
**ty.**

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## Subpart I—Electrical Systems

### GENERAL

- Sec.  
183.401 Purpose, applicability, and effective dates.  
183.402 Definitions.  
183.405 General.

### MANUFACTURER REQUIREMENTS

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183.415 Grounding.  
183.420 Batteries.  
183.425 Conductors: general.  
183.430 Conductors in circuits of less than than 50 volts.  
183.435 Conductors in circuits of 50 volts or more.  
183.440 Secondary circuits of ignition systems.  
183.445 Conductors: support and protection.  
183.450 Conductors: termination.  
183.455 Overcurrent protection: general.  
183.460 Overcurrent protection: special applications.

AUTHORITY: 46 U.S.C. 1454; 49 CFR 1.46(n)  
(1)

## Subpart I—Electrical Systems

### GENERAL

#### § 183.401 Purpose, applicability, and effective dates.

(a) This subpart applies to all boats that have gasoline engines for electrical or mechanical power or propulsion, except outboard engines.

(b) The sections in this subpart are effective on the following dates:

August 1, 1977: § 183.401, § 183.405, § 183.420, § 183.445.

February 1, 1978: § 183.415, § 183.425, § 183.430, § 183.435, § 183.440, § 183.450, § 183.455, § 183.460.

August 1, 1978: § 183.410.

#### § 183.402 Definitions.

As used in this subpart—(a) "ASTM" means American Society for Testing and Materials. ASTM standards in this subpart may be examined at Coast Guard Headquarters, Room 4314, Trans Point Building, 2100 2nd St., SW., Washington, D.C. 20590 and may be obtained from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

(b) "AWG" means American Wire Gauge.

(c) "Electrical component" means electrical equipment such as, but not limited to, conductors, solenoids, motors, generators, alternators, distributors, resistors, appliances and electrical control devices.

(d) "IEEE" means Institute of Electrical and Electronic Engineers, Inc. IEEE standards in this subpart may be examined at Coast Guard Headquarters,

Room 4314, Trans Point Building, 2100 2nd St., SW., Washington, D.C. 20590 and may be obtained from the Institute of Electrical and Electronic Engineers, Inc., 345 East 47th Street, New York, N.Y. 10017.

(e) "NFFPA" means National Fire Protection Association. NFFPA standards in this subpart may be examined at Coast Guard Headquarters, Room 4314, Trans Point Building, 2100 2nd St., SW., Washington, D.C. and may be obtained from the National Fire Protection Association, 470 Atlantic Ave., Boston, MA 02110.

(f) "Pigtails" means external power conductors or wires that are part of electrical components and appliances, such as bilge pumps, blowers, lamps, switches, solenoids, and fuses.

(g) "SAE" means Society of Automotive Engineers, Inc. SAE standards in this subpart may be examined at Coast Guard Headquarters, Room 4314, Trans Point Building, 2100 2nd St., SW., Washington, D.C. 20590 and may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096.

(h) "Sheath" means a material used as a continuous protective covering, such as electrical tape, molded rubber, molded plastic, or flexible tubing, around one or more insulated conductors.

(i) "UL" means Underwriters Laboratories Inc. UL standards in this subpart may be examined at Coast Guard Headquarters, Room 4314, Trans Point Building, 2100 2nd St., SW., Washington, D.C. 20590 and may be obtained from Underwriters Laboratories Inc., 207 East Ohio Street, Chicago, IL 60611.

#### § 183.405 General.

Each electrical component on a boat to which this subpart applies must meet the requirements of this subpart unless the component is part of an outboard engine or part of portable equipment.

### MANUFACTURER REQUIREMENTS

#### § 183.410 Ignition protection.

(a) Each electrical component must not ignite a propane gas and air mixture that is 4.25 to 5.25 percent propane gas by volume surrounding the electrical component when it is operated at each of its manufacturer rated voltages and current loadings, unless it is isolated from gasoline fuel sources, such as engines, and valves, connections, or other fittings in vent lines, fill lines, distribution lines or on fuel tanks, in accordance with paragraph (b) of this section.

(b) An electrical component is isolated

from a gasoline fuel source if—

(1) A bulkhead that meets the requirements of paragraph (c) of this section is between the electrical component and the gasoline fuel source;

(2) The electrical component is—

(i) Lower than the gasoline fuel source and a means is provided to prevent fuel and fuel vapors that may leak from the gasoline fuel source from becoming exposed to the electrical component; or

(ii) Higher than the gasoline fuel source and a deck or other enclosure is between it and the gasoline fuel source; or

(3) The space between the electrical component and the gasoline fuel source is at least two feet and the space is open to the atmosphere.

(c) Each bulkhead required by paragraph (b) (1) of this section must—

(1) Separate the electrical component from the gasoline fuel source and extend both vertically and horizontally the distance of the open space between the fuel source and the ignition source;

(2) Resist a water level that is 12 inches high or one-third of the maximum height of the bulkhead, whichever is less, without seepage of more than one-quarter fluid ounce of fresh water per hour; and

(3) Have no opening located higher than 12 inches or one-third the maximum height of the bulkhead, whichever is less, unless the opening is used for the passage of conductors, piping, ventilation ducts, mechanical equipment, and similar items, or doors, hatches, and access panels, and the maximum annular space around each item or door, hatch or access panel must not be more than one-quarter inch.

#### § 183.415 Grounding.

If a boat has more than one gasoline engine, grounded cranking motor circuits must be connected to each other by a common conductor circuit that can carry the starting current of each of the grounded cranking motor circuits.

#### § 183.420 Batteries.

(a) Each installed battery must not move more than one inch in any direction when a pulling force of 90 pounds or twice the battery weight, whichever is less, is applied through the center of gravity of the battery as follows:

(1) Vertically for a duration of one minute.

(2) Horizontally and parallel to the boat's center line for a duration of one minute fore and one minute aft.

(3) Horizontally and perpendicular to the boat's center line for a duration of one minute to starboard and one minute to port.

(b) Each battery must be installed so that metallic objects cannot come in contact with the ungrounded battery terminals.

(c) Each metallic fuel line and fuel system component within 12 inches and above the horizontal plane of the battery top surface as installed must be shielded with dielectric material.

(d) Each battery must not be directly above or below a fuel tank, fuel filter, or fitting in a fuel line.

(e) Hydrogen gas discharged by a battery must not accumulate in the boat.

(f) The positive terminal of each battery must be identified by the letters "POS", or "P", or the symbol "+" marked on the terminal or on the battery case near the terminal.

(g) Each battery terminal connector must not depend on spring tension for its mechanical connection to the terminal.

#### § 183.425 Conductors: general.

(a) Each conductor must be insulated, stranded copper.

(b) Except for intermittent surges each conductor must not carry a current greater than that specified in Table 5 for the conductor's gauge and temperature rating.

(c) For conductors in engine spaces, amperages must be corrected by the appropriate correction factor in note 1 of Table 5.

(d) Each conductor in a multiconductor sheath must be at least a No. 18 AWG conductor.

(e) Each conductor installed separately must be at least a No. 16 AWG conductor.

(f) Each No. 18 AWG conductor in a multiconductor sheath may not extend out of the sheath more than 30 inches.

(g) This section does not apply to communication systems; electronic navigation equipment; resistance conductors that control circuit amperage; high voltage secondary conductors and terminations that are in ignition systems; pig-tails of less than seven inches of exposed length; and cranking motor conductors.

TABLE 5.—Allowable amperage of conductors

Conductor size (AWG)	Temperature rating of conductor insulation						
	60° C (140° F)	75° C (167° F)	90° C (176° F)	90° C (194° F)	105° C (221° F)	125° C (257° F)	200° C (392° F)
18.....	10	10	15	20	20	25	25
16.....	15	15	20	25	25	30	35
14.....	20	20	25	30	35	40	45
12.....	25	25	35	40	45	50	55
10.....	40	40	50	55	60	70	70
8.....	55	65	70	70	80	90	100
6.....	80	95	100	100	120	125	135
4.....	105	125	130	135	160	170	180
3.....	120	145	150	155	180	195	210
2.....	140	170	175	180	210	225	240
1.....	165	195	210	210	245	265	280
0.....	195	230	245	245	285	305	325
00.....	225	265	285	285	330	355	370
000.....	260	310	330	330	385	410	430
0000.....	300	360	385	385	445	475	510

## NOTES

1. See the following table:

	60° C (140° F)	75° C (167° F)	90° C (176° F)	90° C (194° F)	105° C (221° F)	125° C (257° F)	200° C (392° F)
Temperature rating of conductor.....	0.58	0.75	0.78	0.82	0.85	0.89	1.00

2. See the following table:

Number of current carrying conductors:	Correction factor
3.....	0.70
4 to 6.....	.60
7 to 24.....	.50
25 and above.....	.40

**§ 183.430 Conductors in circuits of less than 50 volts.**

(a) Each conductor in a circuit that has a nominal voltage of less than 50 volts must—

(1) Meet the requirements of § 183.435; or

(2) Meet—

(i) The insulating material temperature rating requirements of SAE Standard J378b dated November 1976; and

(ii) SAE Standard J1127 dated November 1975, or SAE Standard 1128 dated November 1975.

(b) This section does not apply to communication systems; electronic navigation equipment; resistance conductors that control circuit amperage; and pig-tails of less than seven inches of exposed length.

**§ 183.435 Conductors in circuits of 50 volts or more.**

(a) Each conductor in a circuit that has a nominal voltage of 50 volts or more must be—

(1) A conductor that has insulation listed and classified moisture resistant and flame retardant in Article 310, NFPA No. 70-1975, National Electric Code 1975;

(2) A flexible cord type SO, STO, ST, SJO, SJT, or SJTO listed in Article 400, NFPA No. 70-1975, National Electric Code 1975;

(3) A conductor that meets IEEE Std. 48-1971, dated December 3, 1970;

(4) A conductor listed for marine use by an independent testing laboratory which provides listing, labeling, and follow-up service; or

(5) A conductor that meets the mechanical water absorption and flame retardant standards of UL Standard 83, dated July 8, 1976.

(b) Where the nominal circuit voltage of each of three or more current carrying conductors in a duct, bundle, or cable is 50 volts or more, the amperages of each of those conductors must not exceed the value in Table 5 multiplied by the correction factor in note 2 to Table 5 for the number of conductors that carry 50 volts or more.

(c) This section does not apply to communication systems; electronic navigation equipment; resistance conductors that control circuit amperage conductors in secondary circuits of ignition systems; and pig-tails of less than seven inches of exposed length.

**§ 183.440 Secondary circuits of ignition systems.**

(a) Each conductor in a secondary circuit of an ignition system must meet SAE Standard J557, dated January, 1968.

(b) The connection of each ignition conductor to a spark plug, coil, or distributor must have a tight fitting cap, boot, or nipple.

**§ 183.445 Conductors: Support and protection.**

(a) Except for the first 36 inches of a conductor leading from a battery terminal, each conductor or group of conductors must be supported by clamps, or straps not more than 18 inches apart, unless the conductor or group of conductors is enclosed in a rigid duct or conduit. The clamps, straps, ducts, and conduits must be designed to prevent chafing or damage to the conductor insulation.

(b) If a conductor or group of conductors is connected between two components that can move in relation to each other, each conductor or group of conductors must have a loop, slack, or other strain relief.

(c) Each conductor or group of conductors that passes through a bulkhead, structural member, junction box, or other rigid surface must be protected from abrasion.

(d) This section does not apply to communications systems; electronic navigation equipment; and high voltage secondary conductors and terminations in the ignition system.

**§ 183.450 Conductors: termination.**

(a) Each connection to a screw terminal or stud that is outside of a junction box or enclosure must be connected by a closed ring connector, eyelet connector, captive spade connector, mechanical locking connector, or spring locking connector.

(b) Each stripped conductor connected to a compression screw terminal that is outside a junction box or enclosure must be secured mechanically to provide strain relief for the stripped conductor connection.

(c) Each single friction connector, spring type connector, and multi-connector plug that is outside of a junction box or enclosure must not separate if subjected to a six pound tensile force along the axial direction of the connector for one minute.

(d) A soldered connection that is outside a junction box or enclosure must not be the sole means of connection between two or more conductors or between a conductor and a connector, except a conductor may be soldered to a connector that joins the conductor to a battery terminal or stud, if the length of the soldered joint is at least 1.5 times the diameter of the stranded portion of the battery conductor.

(e) Each connection that is outside of a junction box or enclosure and that is used to join conductors to each other or that is used to join a conductor to a connector must not break when subjected for one minute to a tensile force shown

in Table 6 for the smallest conductor size in the connection.

(f) Each ungrounded terminal or stud that is continuously energized must meet § 183.455 or must have a boot, nipple, cap, cover, or shield that prevents accidental short-circuiting at the terminals or studs.

(g) Each termination composed of an ungrounded current carrying conductor, terminal fitting, and connector must be protected from accidental short circuiting with—

(1) Another termination from another circuit composed of an ungrounded current carrying conductor, terminal fitting, and connector; or

(2) Any metal that is grounded.

(h) A conductor must not be joined to another conductor by a wire nut or wire screw.

(i) This section does not apply to communication systems and electronic navigation equipment.

**§ 183.455 Overcurrent protection: general.**

(a) Each ungrounded current-carrying conductor must be protected by a manually reset, tripfree circuit breaker or fuse.

(b) A manually reset, tripfree circuit breaker or fuse must be—

(1) At the source of power for each conductor;

(2) At the point where the conductor size is reduced to a smaller gauge; or

(3) At the origin of a circuit, if the circuit breaker or fuse has a current rating that prevents overloading of the smallest conductor in the circuit.

(c) The current rating of each circuit breaker or fuse must not exceed—

(1) For circuits of less than 50 volts, 150% of the value of the amperage in Table 5 for the conductor size it is protecting; and

(2) For circuits of 50 volts or more, the value of the amperage in Table 5 for the conductor size it is protecting. If this value does not correspond to a standard size or rated circuit breaker or fuse the next larger size or rated circuit breaker or fuse may be used if it does not exceed 150% of the allowed current capacity of the conductor.

(d) The voltage rating of each circuit breaker or fuse must not be less than the nominal circuit voltage of the circuit it is protecting.

(e) This section does not apply to resistance conductors that control circuit amperage; conductors in secondary circuits of ignition systems; pigtailed of less than seven inches of exposed length; and power supply conductors in cranking motor circuits.

**TABLE 6.—TENSILE TEST VALUES FOR  
CONDUCTOR SPLICES**  
(CONDUCTOR-CONDUCTOR AND CONDUCTOR-  
CONNECTOR JOINTS)

Wire size (AWG):	Tensile force pounds
18 -----	10
16 -----	15
14 -----	30
12 -----	35
10 -----	40
8 -----	45
6 -----	50
5 -----	60
4 -----	70
3 -----	80
2 -----	90
1 -----	100
0 -----	125
00 -----	150
000 -----	175
0000 -----	225

**§ 183.460 Overcurrent protection: special applications.**

(a) Each ungrounded supply conductor from a storage battery must have a manually reset, tripfree circuit breaker or fuse, unless the supply conductor is in the main power feed circuit from the battery to an engine cranking motor. The circuit breaker or fuse must be within 72 inches of the battery measured along the conductor, unless the circuit has a switch that disconnects the battery.

(b) Each ungrounded output conductor from an alternator or generator, except for self-limiting alternators or generators, must have a circuit breaker or fuse that has a current rating that does not exceed 120 percent of the maximum rated current of the alternator or generator at 60° C.

[FR Doc.77-2992 Filed 1-28-77;8:45 am]

**Subpart J—Fuel Systems**

**GENERAL**

Sec.	
183.501	Applicability.
183.505	Definitions.
183.507	General.

**EQUIPMENT STANDARDS**

183.510	Fuel tanks.
183.512	Fuel tanks: prohibited materials.
183.514	Fuel tanks: labels.
183.516	Cellular plastic used to encase fuel tanks.
183.518	Fuel tank openings.
183.520	Fuel tank vent systems.
183.522	Fuel tank fill systems.
183.524	Fuel pumps.
183.526	Carburetors.
183.528	Fuel stop valves.
183.530	Spud, pipe, and hose fitting configuration.

183.532	Clips, straps, and hose clamps.
183.534	Fuel filters and strainers.
183.536	Seals and gaskets in fuel filters and strainers.
183.538	Metallic fuel line materials.
183.540	Hoses: identification.
183.542	Fuel systems.

**MANUFACTURING REQUIREMENTS**

183.550	Fuel tanks: installation.
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**TESTS**

183.580	Static pressure test for fuel tanks.
183.582	Static pressure test for fuel systems.
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183.588	Slosh test.
183.590	Fire test.

**AUTHORITY:** 46 U.S.C. 1454; 49 CFR 1.46 (n) (1).

**Subpart J—Fuel Systems**

**GENERAL**

**§ 183.501 Applicability.**

(a) This subpart applies to all boats that have gasoline engines, except outboard engines, for electrical generation or mechanical power for propulsion.

(b) The sections in this subpart are effective on the following dates:

**AUGUST 1, 1977**

183.501	183.562
183.505	183.566
183.507	183.568
183.518	183.572
183.520	183.580
183.528	183.582
183.534	183.584
183.536	183.586
183.538	183.588
183.542	183.590
183.556	

**FEBRUARY 1, 1978**

183.510	183.550
183.514	183.554
183.522	183.560
183.530	183.564
183.532	183.570

**AUGUST 1, 1978**

183.512	183.540
183.516	183.552
183.524	183.558
183.526	

#### § 183.505 Definitions.

As used in this subpart—

"ASTM" means American Society for Testing and Materials. ASTM standards in this subpart may be examined at Coast Guard Headquarters, Room 4314, Trans Point Building, 2100 2nd St., S.W., Washington, D.C. 20590 and may be obtained from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

"Flame arrestor" means a device or assembly that prevents passage of flame through a fuel vent.

"Fuel system" means the entire assembly of the fuel fill, vent, tank, and distribution components, including pumps, valves, strainers, carburetors, and filters.

"Military Specification" means a specification developed by the U.S. Armed Forces. Military Specifications in this subpart may be examined at Coast Guard Headquarters, room 4314, Trans Point Building, 2100 2nd St., S.W. Washington, D.C. 20590 and may be obtained from the Commander, Naval Ship Engineering Center, DOD Standardization Program & Documents Branch, Hyattsville, Maryland 20782.

"SAE" means Society of Automotive Engineers, Inc. SAE standards in this subpart may be examined at Coast Guard Headquarters, Room 4314, Trans Point Building, 2100 2nd St., S.W., Washington, D.C. 20590 and may be obtained from the Society of Automotive Engineers, Inc., 400 Commonwealth Dr., Warrendale, PA 15096.

"Static floating position" means the attitude in which a boat floats in calm water, with each fuel tank filled to its rated capacity, but with no person or item of portable equipment on board.

"UL" means Underwriters' Laboratories, Inc. UL standards in this subpart may be examined at Coast Guard Headquarters, Room 4314, Trans Point Building, 2100 2nd St., S.W., Washington, D.C. 20590 and may be obtained from Underwriters' Laboratories, Inc., 207 East Ohio Street, Chicago, IL 60611.

"USCG Type A Hose" means hose that meets the performance requirements of—

(1) SAE Standard J30C, dated March, 1976 and the requirements of § 183.590; or

(2) UL Standard 1114 dated September 15, 1976.

"USCG Type B Hose" means hose that meets the performance requirements of SAE Standard J30C, dated March, 1976.

#### § 183.507 General.

Each fuel system component on a boat to which this subpart applies must meet the requirements of this subpart unless the component is part of an outboard engine or is part of portable equipment.

#### EQUIPMENT STANDARDS

##### § 183.510 Fuel tanks.

(a) Each fuel tank in a boat must have been tested by its manufacturer under § 183.580 and not leak.

(b) Each fuel tank must not leak if subjected to the fire test under § 183.590. Leakage is determined by the static pressure test under § 183.580, except that the test pressure must be at least one-fourth PSIG.

(c) Each fuel tank of less than 25 gallons capacity must not leak if tested under § 183.584.

(d) Each fuel tank with a capacity of 25 to 99 gallons must not leak if tested under § 183.586.

(e) Each fuel tank of 100 gallons capacity or more must not leak if tested under §§ 183.586 and 183.588.

##### § 183.512 Fuel tanks: prohibited materials.

(a) A fuel tank must not be constructed from terneplate.

(b) Unless it has an inorganic sacrificial galvanic coating on the inside and outside of the tank, a fuel tank must not be constructed from black iron or carbon steel.

(c) A fuel tank encased in cellular plastic or in fiber reinforced plastic must not be constructed from a ferrous alloy.

##### § 183.514 Fuel tanks: labels.

(a) Each fuel tank must have a label that meets the requirements of paragraphs (b) through (d) of this section.

(b) Each label required by paragraph (a) of this section must contain the following information:

(1) Fuel tank manufacturer's name (or logo) and address.

(2) Month (or lot number) and year of manufacture.

(3) Capacity in U.S. gallons.

(4) Material of construction.

(5) The pressure the tank is designed to withstand without leaking.

(6) Model number, if applicable.

(7) The statement, "This tank has been tested under 33 CFR 183.580."

(8) If the tank is tested under § 183.584 at less than 25g vertical accelerations the statement, "Must be installed aft of

the boat's half length."

(c) Each letter and each number on a label must—

(1) Be at least  $\frac{1}{8}$  inch high and

(2) Contrast with the basic color of the label or be embossed on the label.

(d) Each label must—

(1) Withstand the combined effects of exposure to water, oil, salt spray, direct sun light, heat, cold, and wear expected in normal operation of the boat, without loss of legibility; and

(2) Resist efforts to remove or alter the information on the label without leaving some obvious sign of such efforts.

**§ 183.516 Cellular plastic used to encase fuel tanks.**

(a) Cellular plastic used to encase metallic fuel tanks must—

(1) Not change volume by more than five percent or dissolve after being immersed in any of the following liquids for 24 hours at 29° C:

(i) Reference fuel B ASTM D-471, dated December 18, 1968.

(ii) No. 2 reference oil of ASTM D-471, dated December 18, 1968.

(iii) Five percent solution of trisodium phosphate in water; and

(2) Not absorb more than 0.12 pound of water per square foot of cut surface, measured under Military Specification MIL P-21929B, dated June 22, 1970.

(b) Non-polyurethane cellular plastic used to encase metallic fuel tanks must have a compressive strength of at least 60 pounds per square inch at ten percent deflection measured under ASTM D-1621, "Compressive Strength of Rigid Cellular Plastics," dated August 31, 1964.

(c) Polyurethane cellular plastic used to encase metallic fuel tanks must have a density of at least 3.2 pounds per cubic foot, measured under ASTM D-1622, "Apparent Density of Rigid Cellular Plastics," dated September 30, 1963.

**§ 183.518 Fuel tank opening.**

Each opening into the fuel tank must be at or above the topmost surface of the tank.

**§ 183.520 Fuel tank systems.**

(a) Each fuel tank must have a vent system that prevents pressure in the tank from exceeding 80 percent of the pressure marked on the tank label under § 183.514(b)(5).

(b) Each vent must—

(1) Have a flame arrester that can be cleaned unless the vent is itself a flame arrester; and

(2) Not allow a fuel overflow at the rate of up to two gallons per minute to enter the boat.

**§ 183.522 Fuel tank fill systems.**

Fuel must not blow back through the fuel fitting when a tank is—

(a) Between one-fourth and three-fourths full; and

(b) Refueled at a rate of at least nine gallons per minute.

**§ 183.524 Fuel pumps.**

(a) Each diaphragm pump must not leak fuel from the pump if the primary diaphragm fails.

(b) Each electrically operated fuel pump must not operate except when the engine is operating or when the engine is started.

(c) If tested under § 183.590, each fuel pump, as installed in the boat, must not leak more than five ounces of fuel in  $2\frac{1}{2}$  minutes, inclusive of leaks from fuel line, fuel filter and strainer.

**§ 183.526 Carburetors.**

(b) Each carburetor must not leak more than five cubic centimeters of fuel in 30 seconds when—

(1) The float valve is open;

(2) The carburetor is at half throttle; and

(3) The engine is cranked without starting; or

(4) The fuel pump is delivering the maximum pressure specified by its manufacturer.

(c) Each updraft and horizontal draft carburetor must have a device that—

(1) Collects and holds fuel that flows out of the carburetor venturi section toward the air intake;

(2) Prevents collected fuel from being carried out of the carburetor assembly by the shock wave of a backfire or by reverse air flow; and

(3) Returns collected fuel to the engine induction system after the engine starts.

**§ 183.528 Fuel stop valves.**

(a) Each electrically operated fuel stop valve in a fuel line between the fuel tank and the engine must—

(1) Open electrically only when the ignition switch is on; and

(2) Operate manually.

(b) If tested under § 183.590, a fuel stop valve must not leak fuel.

**§ 183.530 Spud, pipe, and hose fitting configuration.**

Except when used for a tank fill line, each spud, pipe, or hose fitting used with hose clamps must have—

(a) A bead;

(b) A flare; or



(c) A series of annular grooves or serrations no less than 0.015 inches deep, except a continuous helical thread, knurl, or groove.

**§ 183.532 Clips, straps, and hose clamps.**

(a) Each clip, strap, and hose clamp must—

(1) Be made from a corrosion resistant material; and

(2) Not cut or abrade the fuel line.

(b) When tested under § 183.590, a clip, strap, or hose clamp must not separate under a one pound tensile force.

(c) The minimum nominal band width of a hose clamp is determined under Table 7 by the outside diameter of the hose.

**TABLE 7**

Outside hose diameter (inches):	Minimum nominal clamp band width (inches)
Less than 7/16-----	1/4
7/16 to 13/16-----	5/16
Greater than 13/16-----	1/2

**§ 183.534 Fuel filters and strainers.**

If tested under § 183.590, each fuel filter and strainer, as installed in the boat, must not leak more than five ounces of fuel in 2½ minutes inclusive of leaks from the fuel pump and fuel line.

**§ 183.536 Seals and gaskets in fuel filters and strainers.**

(a) Each gasket and seal used in a fuel filter and strainer must form an unsplit ring.

(b) Each gasket and each sealed joint in a fuel filter and strainer must not leak when subjected for 24 hours to a gasoline that has at least a 50 percent aromatic content at the test pressure determined under § 183.582(a).

**§ 183.538 Metallic fuel line materials.**

Each metallic fuel line connecting the fuel tank with the fuel inlet connection on the engine must—

(a) be made of seamless annealed copper, nickel copper, or copper-nickel; and

(b) except for corrugated flexible fuel line, have a minimum wall thickness of 0.029 inches.

**§ 183.540 Hoses: identification.**

(a) Each "USCG Type A" hose and each "USCG Type B" hose must be identified by the manufacturer by a marking on the hose itself. If the complete text of the marking is not on a section of hose, the boat manufacturer must attach a tag that meets the requirements of paragraphs (b) and (c) of this section.

(b) Each marking and tag must contain the following information in English:

(1) The statement "USCG TYPE (insert A or B) HOSE."

(2) The year in which the hose was manufactured.

(3) The manufacturer's name or registered trademark.

(c) Each character must be block capital letters and numerals that are at least one-eighth inch high.

(d) Each marking must be permanent, legible, and on the outside of the hose at intervals of 12 inches or less.

**§ 183.542 Fuel systems.**

Each fuel system in a boat must have been tested under § 183.582 by the boat manufacturer and not leak.

**MANUFACTURER REQUIREMENTS**

**§ 183.550 Fuel tanks: installation.**

(a) Each fuel tank must not be integral with any boat structure or mounted on an engine.

(b) Each fuel tank must not move at the mounting surface more than one-fourth inch in any direction.

(c) Each fuel tank must not support a deck, bulkhead, or other structural component.

(d) Water must drain from the surface of each metallic fuel tank when the boat is in its static floating position.

(e) Each fuel tank support, chock, or strap that is not integral with a metallic fuel tank must be insulated from the tank surface by a nonmoisture absorbing material.

(f) Cellular plastic must not be the sole support for a metallic fuel tank.

(g) If cellular plastic is the sole support of a non-metallic fuel tank, the cellular plastic must meet the requirements of § 183.516 (b) or (c)

(h) Each fuel tank labeled under § 183.514(b)(8) for installation aft of the boat's half length must be installed with its center of gravity aft of the boat's half length.

**§ 183.552 Plastic encased fuel tanks: installation.**

(a) Each fuel tank encased in cellular plastic foam or in fiber reinforced plastic must have the connections, fittings, and labels accessible for inspection and maintenance.

(b) If a metallic fuel tank is encased in cellular plastic or in fiber reinforced plastic, water must not collect between the plastic and the surface of the tank

or be held against the tank by capillary action.

(c) If the plastic is bonded to the surface of a metallic fuel tank, the adhesive strength of the metal to the plastic bond must exceed the cohesive strength of the plastic.

#### § 183.554 Fittings, joints, and connections.

Each fuel system fitting, joint, and connection must be arranged so that it can be reached for inspection, removal, or maintenance without removal of permanent boat structure.

#### § 183.556 Plugs and fittings.

(a) A fuel system must not have a fitting for draining fuel.

(b) A plug used to service the fuel filter or strainer must have a tapered pipe-thread or be a screw type fitted with a locking device other than a split lock washer.

#### § 183.558 Hoses and connections.

(a) Each hose between the fuel pump and the carburetor must be "USCG Type A" hose.

(b) Each hose used for a vent line or fill line and each hose from the fuel tank to the fuel inlet connection on the engine must be—

(1) "USCG Type A" hose; or

(2) "USCG Type A" or "USCG Type B" hose, if no more than five ounces of fuel is discharged in 2½ minutes when—

(i) The hose is severed at the point where maximum drainage of fuel would occur,

(ii) The boat is in its static floating position, and

(iii) The fuel system is filled to the capacity marked on the tank label under § 183.514(b) (5).

(c) Each hose must be secured by—

(1) A swaged sleeve;

(2) A sleeve and threaded insert; or

(3) A hose clamp.

(d) The inside diameter of a hose must not exceed the actual minor outside diameter of the connecting spud, pipe, or fitting by more than the distance shown in Table 8.

TABLE 8

If minor outside diameter of the connecting spud, pipe, or fitting is—	The inside diameter of the hose must not exceed the minor outside diameter of the connecting spud, pipe, or hose fitting by more than the following distance:
Less than ¾ in....	0.020 in.
¾ in. to 1 in.....	0.035 in.
Greater than 1 in...	0.065 in.

#### § 183.560 Hose clamps: installation.

Each hose clamp on a hose from the fuel tank to the fuel inlet connection on the engine, a hose between the fuel pump and the carburetor, or a vent line must—

(a) Be used with hose designed for clamps;

(b) Be at least one clamp width from the hose end;

(c) Be beyond the bead, flare, or over the serrations of the mating spud, pipe, or hose fitting; and

(d) Not depend solely on the spring tension of the clamp for compressive force.

#### § 183.562 Metallic fuel lines.

(a) Each metallic fuel line that is mounted to the boat structure must be connected to the engine by a flexible fuel line.

(b) Each metallic fuel line must be attached to the boat's structure within four inches of its connection to a flexible fuel line.

#### § 183.564 Fuel tank fill systems.

(a) Each fuel fill opening must be located so that a gasoline overflow of up to five gallons per minute for at least five seconds will not enter the boat when the boat is in its static floating position.

(b) Each hose in the tank fill system must be secured to a pipe, spud, or hose fitting by—

(1) A swaged sleeve;

(2) A sleeve and threaded insert; or

(3) Two adjacent metallic hose clamps that do not depend solely on the spring tension of the clamps for compressive force.

(c) Each hose clamp in the tank fill system must be used with a hose designed for clamps.

(d) Hose clamps used in the tank fill system must—

(1) Have a minimum nominal band width of at least one-half inch; and

(2) Be over the hose and the spud, pipe, or hose fitting and not less than one-half inch from the end of the hose.

#### § 183.566 Fuel pumps: placement.

Each fuel pump must be on the engine it serves or within 12 inches of the engine, unless it is a fuel pump used to transfer fuel between tanks.

#### § 183.568 Anti-siphon protection.

Each fuel line from the fuel tank to the fuel inlet connection on the carburetor must—

(a) Be above the level of the tank top; or

(b) Have an anti-siphon device or an electrically operated fuel stop valve—

- (i) at the tank withdrawal fitting; or
- (ii) installed so the line from the fuel tank is above the top of the tank.

**§ 183.570 Fuel filters and strainers: installation.**

Each fuel filter and strainer must be supported on the engine or boat structure independent from its fuel line connections, unless the fuel filter or strainer is inside a fuel tank.

**§ 183.572 Grounding.**

Each metallic component of the fuel fill system and fuel tank which is in contact with fuel must be statically grounded so that the resistance between the ground and each metallic component of the fuel fill system and fuel tank is less than 100 ohms.

**TESTS**

**§ 183.580 Static pressure test for fuel tanks.**

A fuel tank is tested by performing the following procedures in the following order:

(a) Fill the tank with air or inert gas to the pressure marked on the tank label under § 183.514(b)(5). The pressure is measured by a calibrated pressure gauge with a pressure range not exceeding three times the test pressure required by this paragraph or by a manometer.

(b) Examine each tank fitting and seam for leaks using a leak detection method other than the pressure drop method.

**§ 183.582 Static pressure test for fuel systems.**

A fuel system is tested by performing the following procedures in the following order:

(a) Fill the portion of the system that is between the fuel line connection at the engine fuel inlet and the fill and vent fitting on the boat with air or inert gas to the greater of the following pressures:

(1) Three PSIG.

(2) One and one-half times the pressure created at the lowest point in the fuel system when the fill or vent line, whichever is lower in height, is filled to its top with fuel.

(b) Read the pressure. The pressure is measured by a calibrated pressure gauge with a pressure range not exceeding three times the test pressure required by this paragraph or by a manometer.

(c) Wait at least five minutes and thereafter wait one additional minute for each 10 gallon increment, or fraction thereof, in the tank's capacity greater than 50 gallons.

(d) Read the pressure in accordance with paragraph (b) of this section. A pressure drop measured at the end of the time required by paragraph (c) of this section is due to leakage.

(e) If no pressure drop is measured by the manometer or pressure gauge, then while the system remains pressurized, examine each fuel fitting, joint, and connection except each connection at fill and vent fittings for leaks, using a leak detection method other than the pressure drop method.

**§ 183.584 Shock test.**

A fuel tank is tested by performing the following procedures in the following order:

(a) Perform the static pressure test under § 183.580.

(b) If the tank is non-metallic, fill it to capacity with a gasoline that has at least a 50 percent aromatic content. Keep the fuel in the tank at 21° C or higher for 30 days prior to testing.

(c) Mount the tank to the platform of an impact test machine.

(d) Fill the tank to capacity with water.

(e) Apply one of the following accelerations within three inches of the center of the horizontal mounting surface of the tank. The duration of each vertical acceleration pulse is measured at the base of the shock envelope.

(1) If the tank is not labeled under § 183.514(b)(8) for installation aft of the half length of the boat, apply 1000 cycles of 25g vertical accelerations at a rate of 80 cycles or less per minute. The duration of the acceleration pulse must be between six and 14 milliseconds.

(2) If the tank is manufactured for installation with its center of gravity aft of the half length of the boat, apply 1000 cycles of 15g vertical accelerations at a rate of 80 cycles or less per minute. The duration of the shock pulse must be between six and 14 milliseconds.

(f) Perform the static pressure test under § 183.580.

**§ 183.586 Pressure impulse test.**

A fuel tank is tested by performing the following procedures in the following order:

(a) Perform the static pressure test under § 183.580.

(b) If the tank is non-metallic, fill it

to capacity with a gasoline that has at least a 50 percent aromatic content. Keep the fuel in the tank at 21° C or higher for 30 days prior to testing.

(c) Mount the tank on a test platform.

(d) Fill the tank to capacity with water.

(e) Cap and seal each opening in the tank.

(f) Apply 25,000 cycles of pressure impulse at the rate of no more than 15 impulses per minute varying from zero to three PSIG to zero inside the tank top from a regulated source of air, inert gas, or water.

(g) Perform the static pressure test under § 183.580.

#### § 183.588 Slosh test.

A fuel tank is tested by performing the following procedures in the following order:

(a) Perform the static pressure test under § 183.580.

(b) Perform the pressure impulse test under § 183.586.

(c) Secure the tank to the platform of a tank rocker assembly.

(d) Fill the tank to one-half capacity with water.

(e) Cap and seal each opening in the tank.

(f) Apply 500,000 cycles of rocking motion 15 degrees to each side of the tank centerline at the rate of 15 to 20 cycles a minute. The axis of rotation of the rocker and fuel tank must be perpendicular to the centerline of the tank length at a level six inches or less above or below the tank's bottom.

(g) Perform the static pressure test under § 183.580.

#### § 183.590 Fire test.

(a) A piece of equipment is tested under the following conditions and procedures:

(1) Fuel stop valves, "USCG Type A" hoses, clips, straps, and hose clamps are tested in a fire chamber.

(2) Fuel filters, strainers and pumps are tested in a fire chamber or as installed on the engine in the boat.

(3) Fuel tanks must be tested filled with fuel to one-fourth the capacity marked on the tank in a fire chamber or in an actual or simulated hull section.

(b) Each fire test is conducted with free burning heptane and the component must be subjected to a flame for 2½ minutes.

(c) If the component is tested in a fire chamber—

(1) The temperature within one inch of the component must be at least 648°C sometime during the 2½ minute test;

(2) The surface of the heptane must be eight to 10 inches below the component being tested; and

(3) The heptane must be in a container that is large enough to permit the perimeter of the top surface of the heptane to extend beyond the vertical projection of the perimeter of the component being tested.

(d) If the component is being tested as installed on an engine, heptane sufficient to burn 2½ minutes must be poured over the component and allowed to run into a flat bottomed pan under the engine. The pan must be large enough to permit the perimeter of the top surface of the heptane to extend beyond the vertical projection of the perimeter of the engine.

(e) If a fuel tank is being tested in an actual or simulated hull section, the actual or simulated hull section must be of sufficient size to contain enough heptane to burn for 2½ minutes in a place adjacent to the tank.

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